

# PCB INTERCONNECT PRODUCTS

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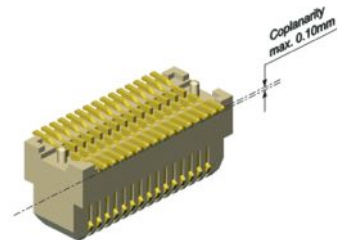


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## General information concerning the E-tec interconnect products

E-tec **SMT** connectors, male or female, are offered with a coplanarity of max. 0.10mm. They are adapted to all modern SMT soldering process and they can be handled easily with all currently existing placing techniques.

Customers may choose between various packaging options, such as tray, tube and reel.



### Tolerances:

All dimensions shown in this catalog represent average values. For precise +/- tolerance values please request a specific product datasheet. All pin header dimensions "A" have a general tolerance of +/- 0.25mm, unless otherwise indicated.

### Plating:

- 99 = Standard Tin plating over Nickel
  - 55 = Standard Gold plating over Nickel
  - 95 = Standard selective Tin/Gold plating over Nickel
- Other platings are offered on request

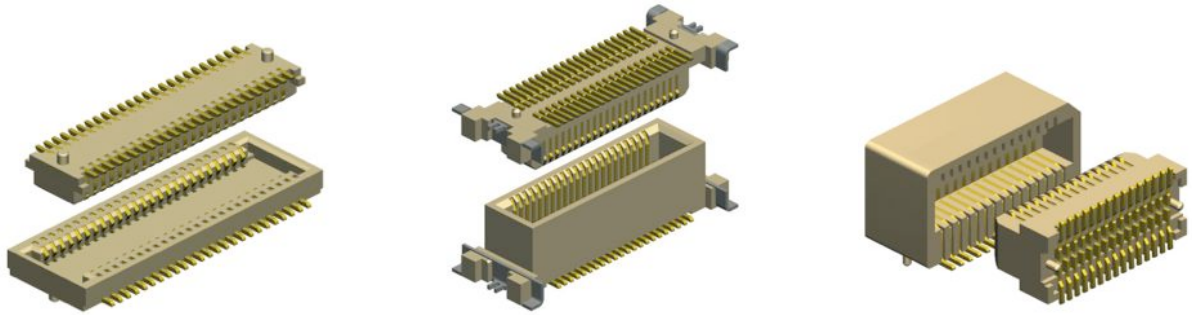
### Specifications:

The data contained in this catalog is of general nature and refers to standard products. For example a „Current rating“ at an ambient temperature of 25°C reflects the value per individual contact. Should you require any further data or test reports, you can obtain this information from your nearest E-tec sales office. The E-tec connectors conform with signal integrity requirements at high data and frequency rates. However we cannot offer a general information about the max. frequency or data transmission rate. For such a statement, it would require more information about the chosen configuration and pin-out, the length of the cable and/or any other specific requirements regarding the application itself and its related signal integrity.

## GENERAL POLICY

All information contained in this catalog, including illustrations, specifications and dimensions are accurate to the best of our knowledge, and reflect the status as at the date of publication. Due to technical progress, it is subject to change without notice. Application information is informational in nature and shall not be construed to warrant suitability of products for any particular purpose as performance may vary depending on the conditions to which a product is subjected. Unless otherwise confirmed at the time of order, all E-tec products are non cancellable and non returnable items (NCNR). E-tec products are warranted for 30 days and the warranty is limited strictly to replacement of products. This warranty does not cover any claims for natural wear and tear, nor for any compensations, such as loss of production, loss of use, loss of orders, loss of profit, nor any other direct or indirect damages.

## Fine Pitch Plug Board Connectors

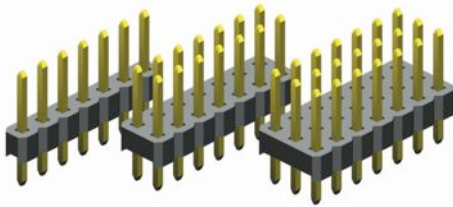


0.50mm - 0.60mm - 0.80mm pitch Page 9

## Board to Board & Board to Wire Connectors

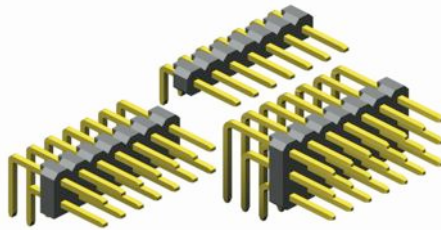
### PIN HEADER

Straight



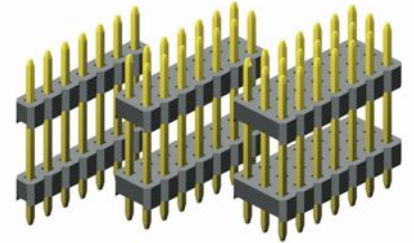
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Right Angle



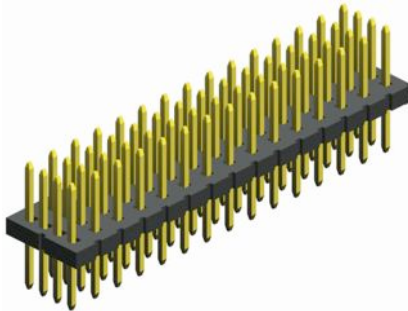
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Double Plastic Board Spacer



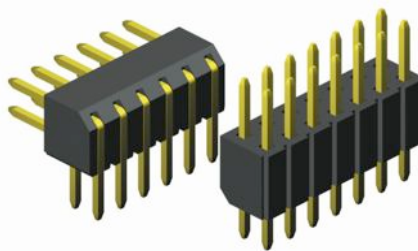
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PC 104 Type



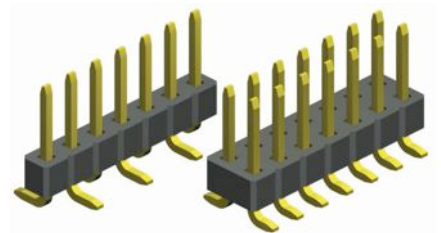
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High Base "Board To Board"



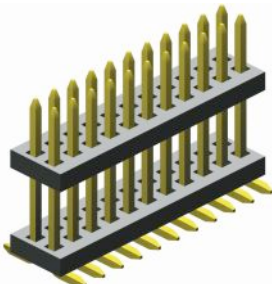
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SMT straight



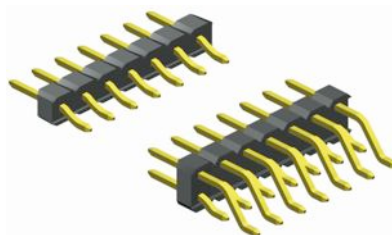
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SMT Double Plastic Board Spacer



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SMT "slanted"



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Jumper & Shorting Links



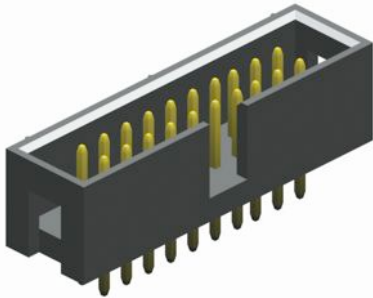
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# PRODUCT OVERVIEW

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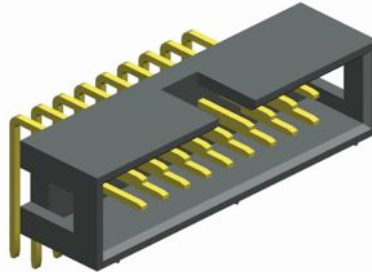
## BOX HEADER

Straight Box Header



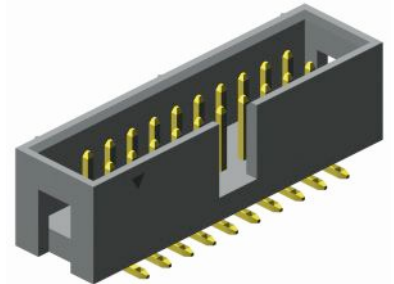
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Right Angle Box Header



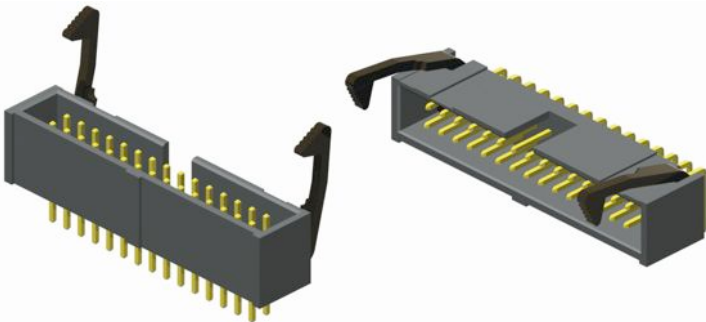
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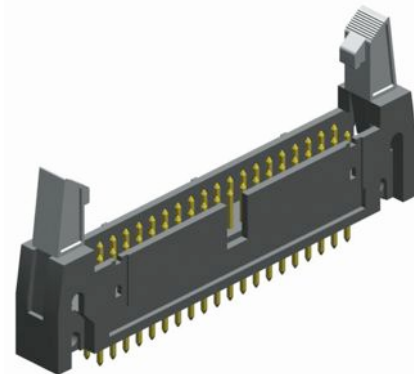
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Box Header  
with metal ejection latches  
straight & right angle



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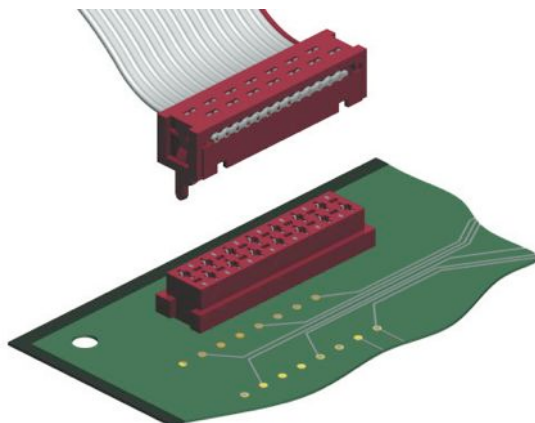
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straight, right angle & SMT



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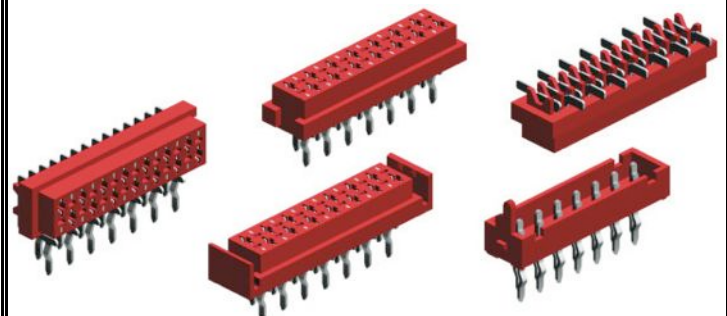
IDC Type for Ribbon Cable UL Style 2651



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## Mini - Mate™ Connectors

SMT & THT Type



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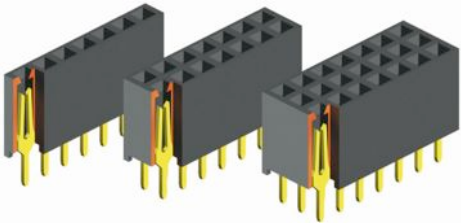
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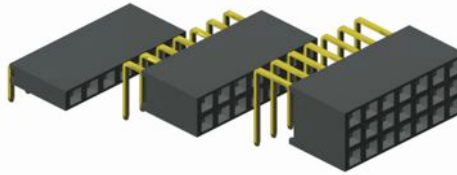
## FEMALE HEADERS

Straight Types single & dual row



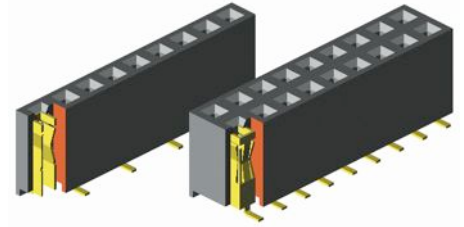
1.27mm pitch: Page 28 & 29  
 2.00mm pitch: Page 48 & 49  
 2.54mm pitch: Page 69 to 71

Right Angle Types



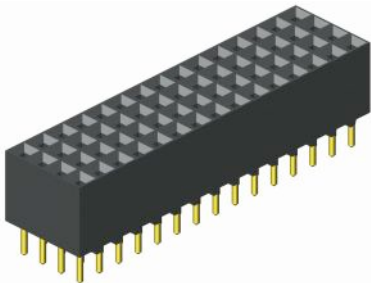
1.27mm pitch: Page 28  
 2.00mm pitch: Page 48  
 2.54mm pitch: Page 69 to 71

SMT "standard profile" Types



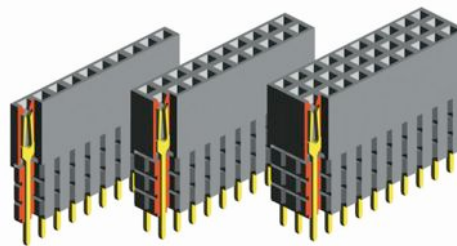
1.27mm pitch: Page 31 to 33  
 2.00mm pitch: Page 54  
 2.54mm pitch: Page 77

PC 104+ Type



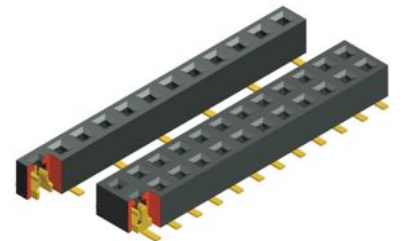
2.00mm pitch: Page 51

Elevated Types



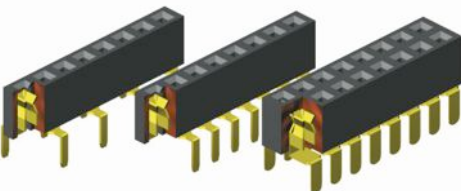
2.00mm pitch: Page 50  
 2.54mm pitch: Page 72

SMT "low profile" Types



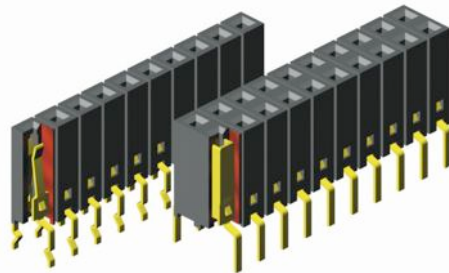
1.00mm pitch: Page 14  
 1.27mm pitch: Page 34 to 36  
 2.00mm pitch: Page 55 & 56  
 2.54mm pitch: Page 78

Dual Entry Types "low profile"



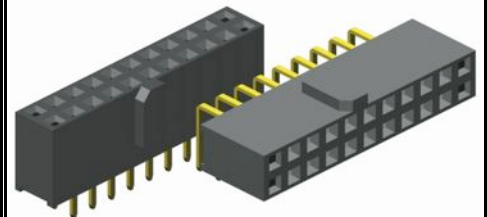
2.00mm pitch: Page 52  
 2.54mm pitch: Page 74

Dual Entry Type "standard profile"



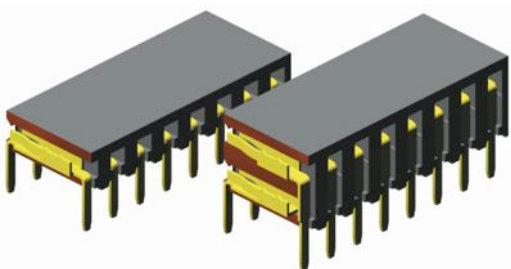
2.54mm pitch: Page 73

Shrouded Mating Types



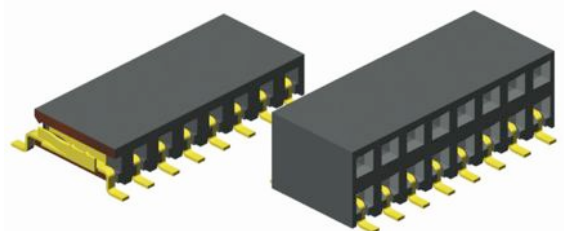
2.54mm pitch: Page 75

Through Hole (THT) Side Entry Types



1.27mm pitch: Page 30  
 2.00mm pitch: Page 53  
 2.54mm pitch: Page 76

SMT Side Entry Types



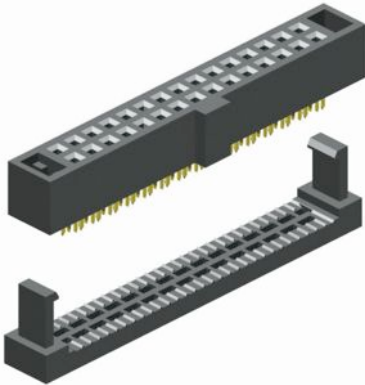
1.27mm pitch: Page 37  
 2.00mm pitch: Page 57  
 2.54mm pitch: Page 79

# PRODUCT OVERVIEW

click on page numbers

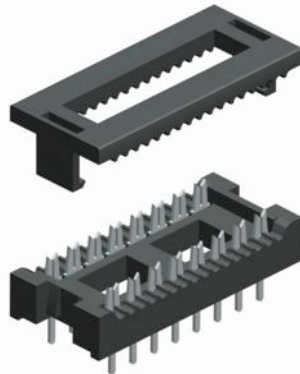
## IDC CONNECTORS

IDC Female Headers



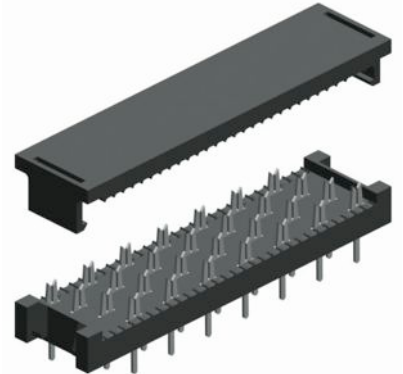
**1.27mm pitch:** Page 38  
**2.00mm pitch:** Page 58  
**2.54mm pitch:** Page 80

DIP Plugs



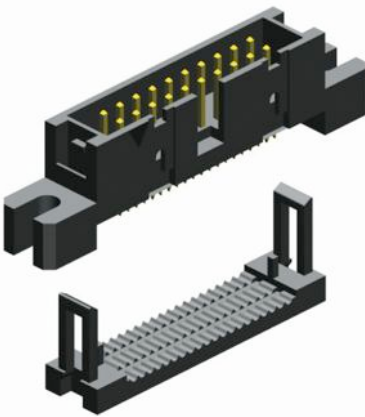
**2.00mm x 2.00mm**  
IDC pitch 1.00mm: Page 84  
**2.54mm**  
IDC pitch 1.27mm: Page 85

Transition Connectors



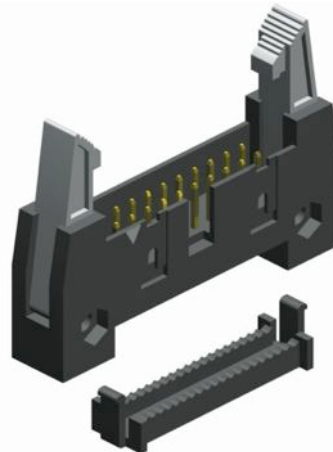
**2.54mm**  
IDC pitch 1.27mm: Page 86

IDC Box Headers



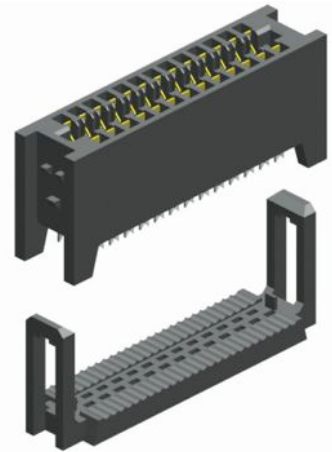
**2.54mm pitch:** Page 82

IDC DIN Headers DIN 41 651



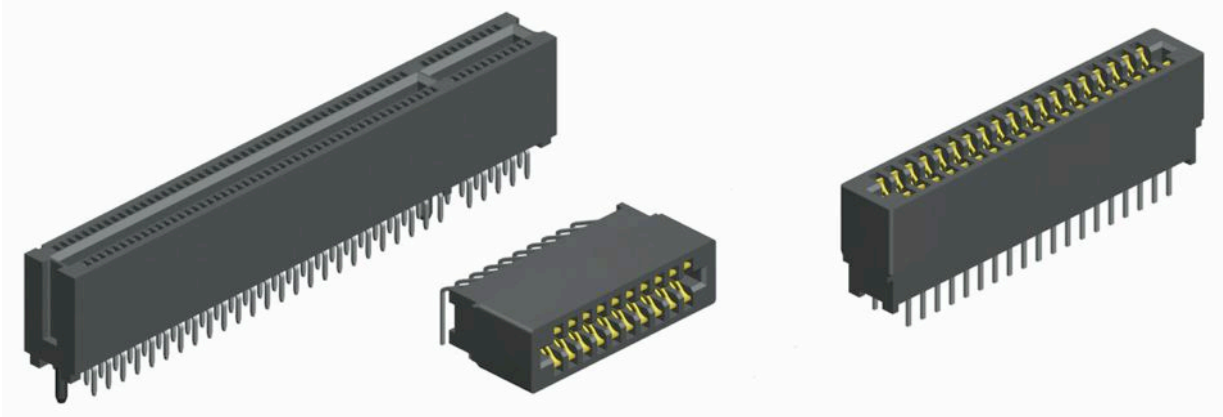
**2.54mm pitch:** Page 82

IDC Card Edge Connectors



**2.54mm pitch:** Page 90

## CARD EDGE CONNECTORS

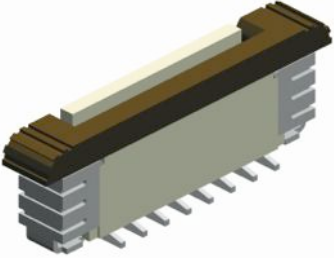
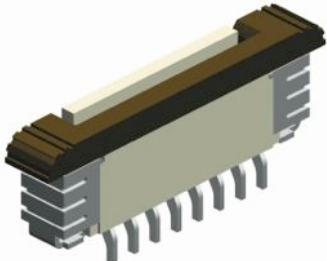
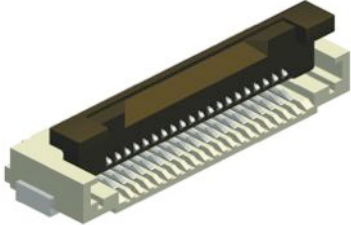
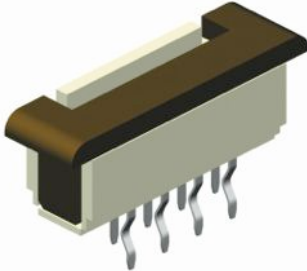
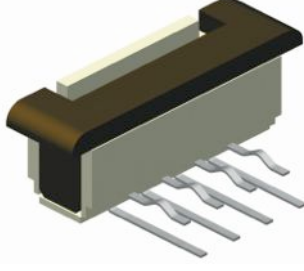

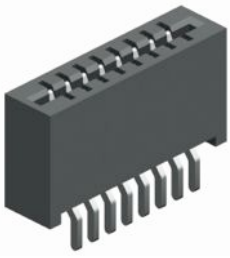
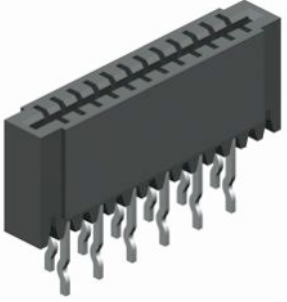
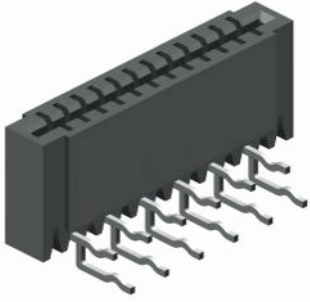


**PCI** 1.27mm pitch : Page 87  
**Card Edge** 1.27mm pitch : Page 88  
**Card Edge** 2.54mm pitch : Page 89

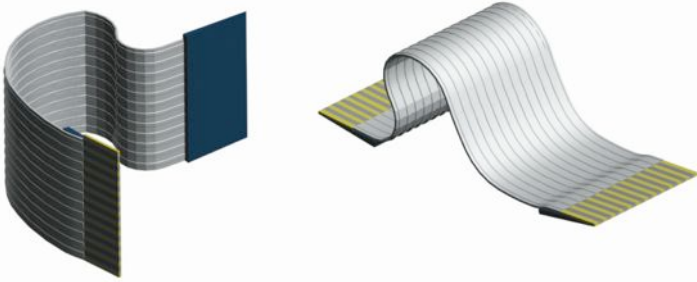
# PRODUCT OVERVIEW

[click on page numbers](#)

## FPC/FFC CONNECTORS

<p><b>ZIF</b> SMT FPC/FFC Type vertical</p>  <p><b>0.50mm pitch:</b> Page 91 &amp; 93 <b>1.00mm pitch:</b> Page 97 &amp; 99</p>	<p><b>ZIF</b> SMT FPC/FFC Type horizontal</p>  <p><b>0.50mm pitch:</b> Page 92 &amp; 94 <b>0.80mm pitch:</b> Page 96 <b>1.00mm pitch:</b> Page 98 &amp; 100</p>	<p><b>ZIF</b> SMT FPC/FFC Type horizontal <b>“Easy-on” Type</b></p>  <p><b>0.50mm pitch:</b> Page 95</p>
<p><b>ZIF</b> FPC/FFC Type straight</p>  <p><b>1.00mm pitch:</b> Page 101 <b>1.25mm pitch:</b> Page 110</p>	<p><b>ZIF</b> FPC/FFC Type right angle</p>  <p><b>1.00mm pitch:</b> Page 102 <b>1.25mm pitch:</b> Page 110</p>	<p><b>LIF</b> SMT FPC/FFC Type vertical</p>  <p><b>1.00mm pitch:</b> Page 103</p>
<p><b>LIF</b> SMT FPC/FFC Type horizontal</p>  <p><b>1.00mm pitch:</b> Page 104 <b>1.25mm pitch:</b> Page 107</p>	<p><b>LIF</b> FPC/FFC Type straight</p>  <p><b>1.00mm pitch:</b> Page 105 <b>1.25mm pitch:</b> Page 108 <b>2.54mm pitch:</b> Page 111</p>	<p><b>LIF</b> FPC/FFC Type right angle</p>  <p><b>1.00mm pitch:</b> Page 106 <b>1.25mm pitch:</b> Page 109 <b>2.54mm pitch:</b> Page 112</p>

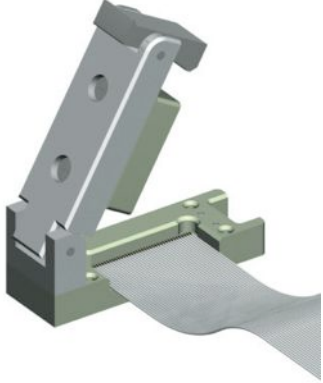
## FLEX CABLE



**Pitch:** 0.50mm - 0.80mm - 1.00mm - 1.25mm - 1.27mm - 2.00mm - 2.54mm

Page 113

## ZIF Test Sockets for FLEX CABLE



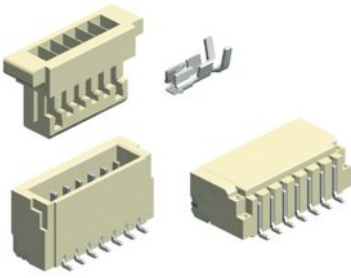
Available for pitch 0.50mm to 2.54mm

Page 114



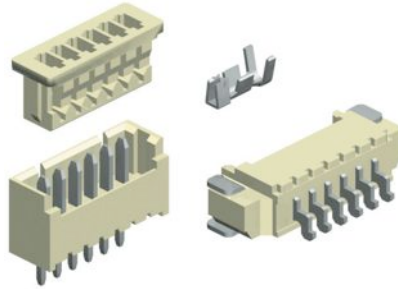
## CRIMP CONNECTORS

1.00mm pitch Types



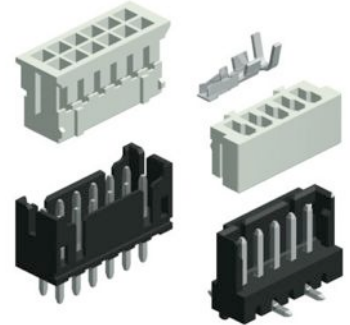
**Page 123**

1.25mm pitch Types



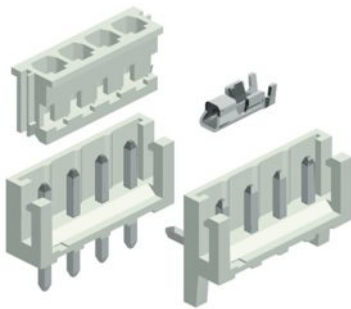
**Page 124**

2.00mm pitch Types



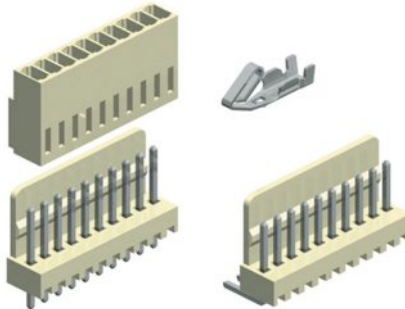
**Page 125 & 126**

2.50mm pitch Types



**Page 127 & 128**

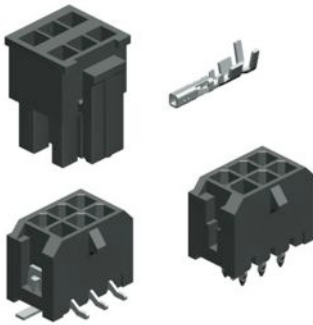
2.54mm Types



**Page 129**

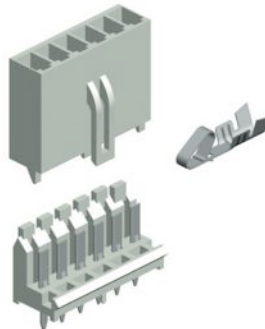
## POWER CONNECTORS

3.00mm Types



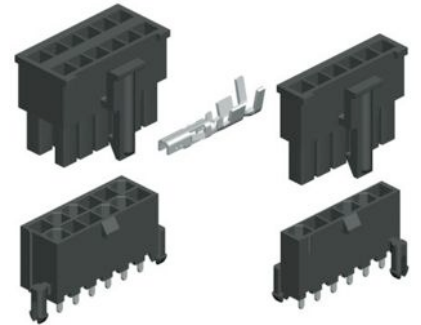
**Page 130**

3.96mm Types



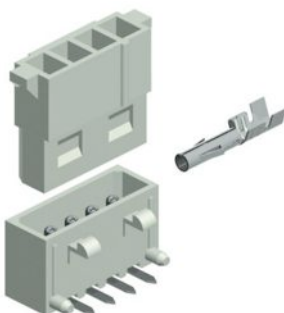
**Page 131**

4.20mm Types



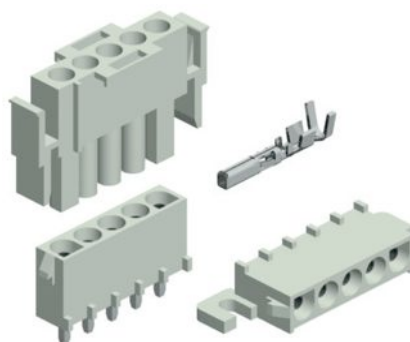
**Page 132 & 133**

5.08mm Types



**Page 134 & 135**

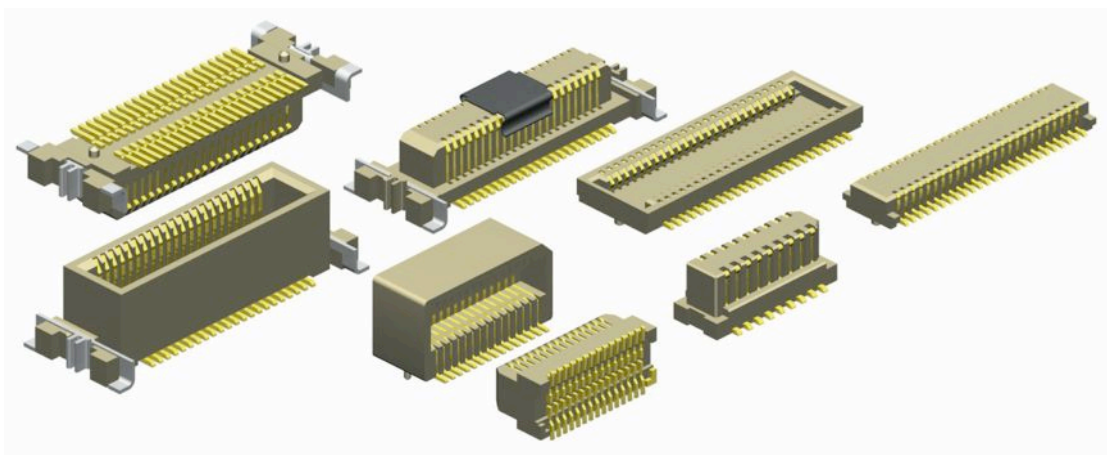
6.35mm Types



**Page 136**

# Fine Pitch

## Plug-Board Connectors



Fine pitch board-to-board connectors allow high density low profile PCB interconnections. These connectors are generally not designed for high insertion/extraction cycles but for one time interconnection, with a possibility to disconnect a limited number of times (around 5 times) during the life time of the product for maintenance purposes only.

Due to the very large variety of design requirements (pincount, board height, pitch, soldertabs, etc) these fine pitch board-to-board connectors are being presented with the following generic E-tec datasheet which allows to highlight the specific project requirements. Based on this information, our production will be able to determine if the current toolings can be adjusted to your requirements and/or if new toolings need to be set-up or if any other close equivalents can be offered as an alternative.

# Plug-Board Connector - SMT -

0.50mm - 0.60mm - 0.80mm Pitch

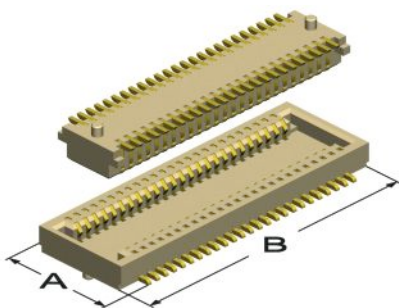


- Fine pitch, super low profile, from 1.50mm to 9.50mm between the boards
- The stamped, solid contacts assure reliable PC Board connections
- Tube or Reel packing available
- Also available with "locating pegs" for easy positioning of the connector during placement
- Some types can also be offered with metal solder tabs, which provide additional mechanical strength to avoid damages to the solder joints during disconnection of the male & female connectors.

**Please inform us of your application and precise requirements, so that our product engineers may offer you a suitable solution.**

Please indicate your dimensional requirements for the  
 0.50mm  0.60mm  0.80mm pitch  
 „Plug-Board“ connector.  
 Solutions **without** metal solder tabs,  
 but with & without locating pegs.

Number of contacts in total .....

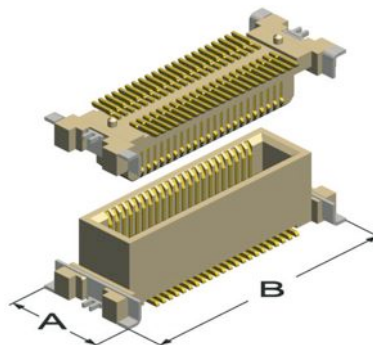


Dimension „A“ (max.): .....

Dimension „B“ (max.): .....

Please indicate your dimensional requirements for the  
 0.50mm  0.60mm  0.80mm pitch  
 „Plug-Board“ connector.  
 Solutions **with** metal solder tabs,  
 but with & without locating pegs.

Number of contacts in total .....

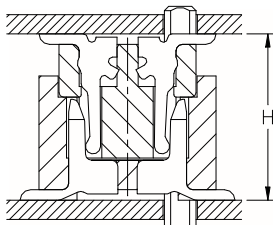
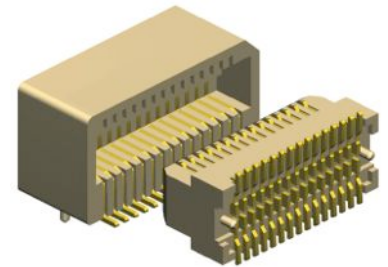


Dimension „A“ (max.): .....

Dimension „B“ (max.): .....

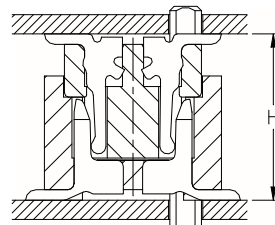
Please indicate your dimensional requirements for the  
 0.50mm  0.60mm  0.80mm pitch  
 right angle type „Plug-Board“ connector.  
 Solutions **without** metal solder tabs,  
 but with & without locating pegs.

Number of contacts in total .....



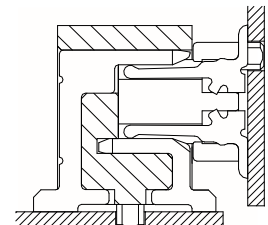
Your board-to-board requirement  
 Dimension „H“: .....

Do you wish to receive this connector  
 with  or without  locating peg?



Your board-to-board requirement  
 Dimension „H“: .....

Do you wish to receive this connector  
 with  or without  locating peg?



Do you wish to receive this connector  
 with  or without  locating peg?

**In addition, please also provide the following information:**

**For which application do you intend to use our fine pitch „Plug Board“ connector?**

.....

.....

**Please indicate your quantity requirement for „prototypes“ .....** and **„production“ .....**

**Please also indicate the expected „life time“ of your project .....**

**Your Company Name & Address:** .....

.....

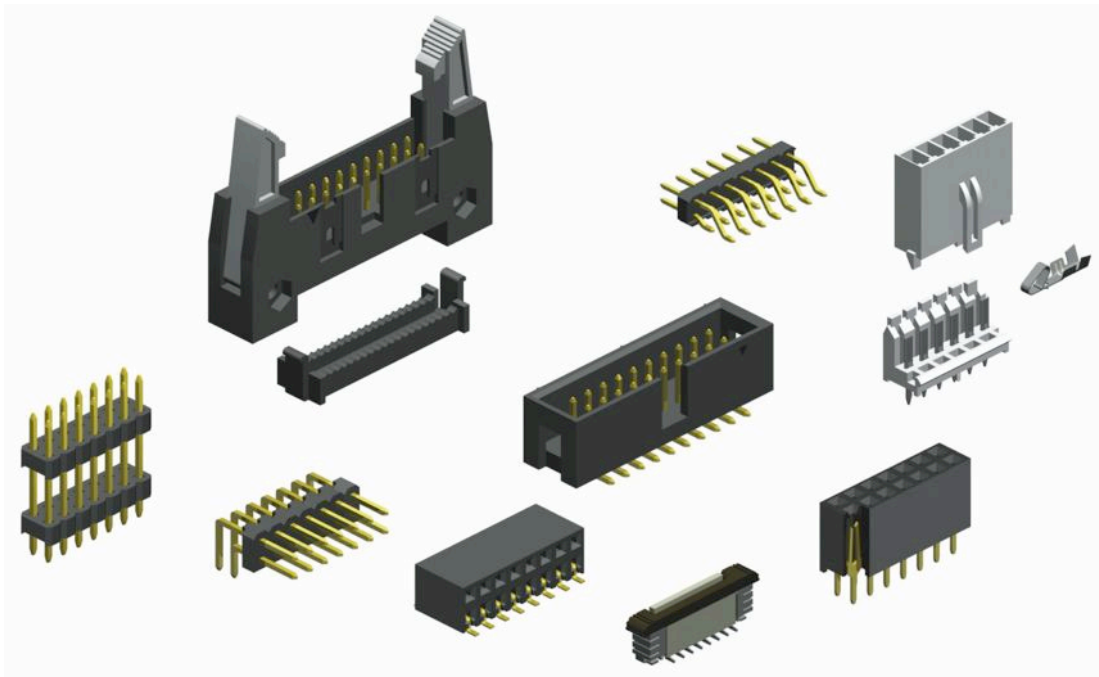
**Your Name, Phone, FAX & e-mail** .....

**Please FAX this page to the nearest E-tec sales office and we will get back to you as soon as possible with a solution adapted to your needs.**

### Specifications for E-tec fine pitch Plug Board Connectors

Current rating	0.3 A	Operating temperature	- 45°C to +125°C
Insulator resistance	500 MΩ min. at 100 V DC	Processing temperature	+230°C for 60 sec. max. +260°C for 10 sec. max.
Contact resistance	50 mΩ max. at 100 mA	Contact material	Phosphor Bronze
Withstanding voltage	150 V AC 1 minute	Insulator material	Nylon UL 94 V-0

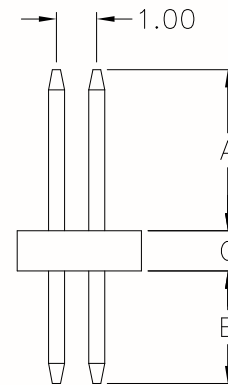
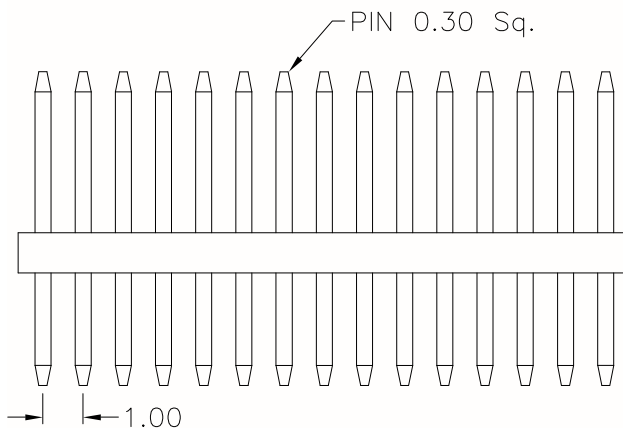
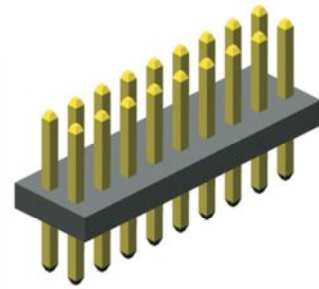
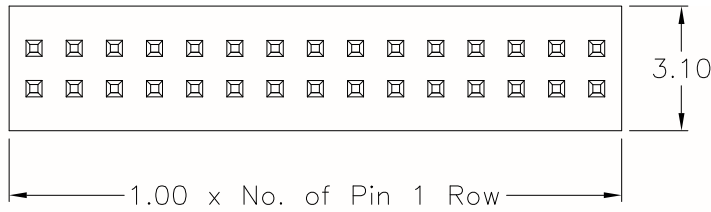
# Board to Board & Cable to Board Connectors



E-tec offers a very large variety of board-to-board and cable-to-board connectors, which take care of nearly all requirements a customer may have in terms of required board connections.

The male/female board-to-board connectors are available in 1.00mm, 1.27mm, 2.00mm and 2.54mm pitch. For the cable-to-board connectors the available pitches start from 0.50mm upwards. The following catalog pages show the standard connector designs, but many other pin lengths or custom designs can be offered on request.

1.00mm pitch Pin Header  
 - THT - dual row straight

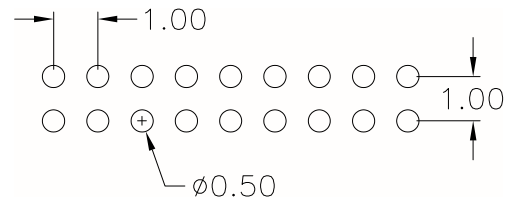


**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	100 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	Copper alloy
Insulator material	Nylon or LCP UL 94 V-0

*(RoHS compliant)*

**PCB Hole Layout**



**How to order**

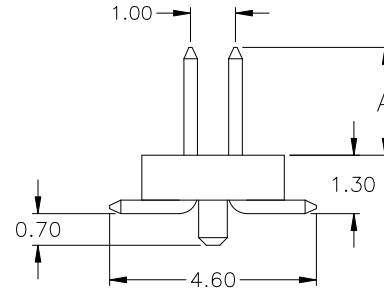
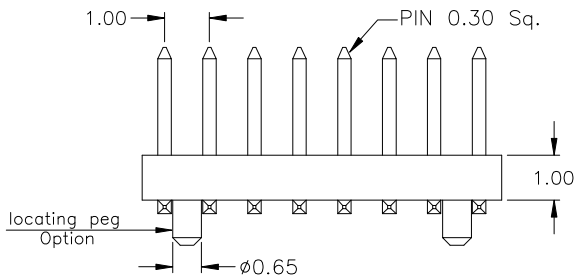
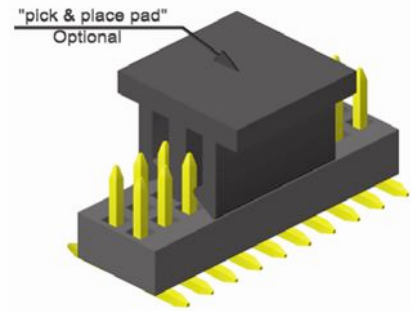
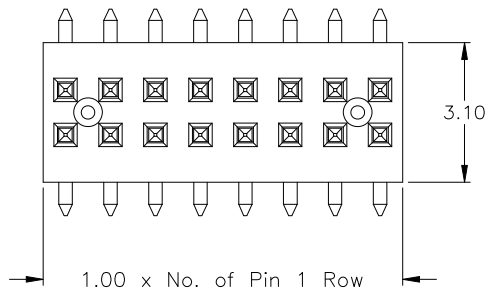
SL 2 - xxx - S xxx/x - 55 / 00

Nbr of pins
004 to 080

Pin code	DIM "A"	DIM "B"	DIM "C"
050/1	2.00 mm	2.00 mm	1.00 mm
050/2	3.20 mm	2.30 mm	1.00 mm
050/3	3.00 mm	2.30 mm	1.00 mm
112/1	6.50 mm	3.20 mm	1.50 mm
Other dimensions on request			

Plating
55 = gold
Other platings on request

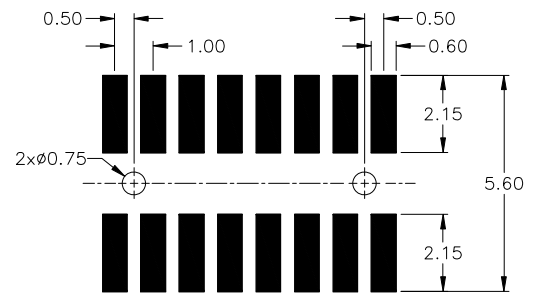
1.00mm pitch Pin Header  
 - SMT - low profile dual row



**APPLICATION AND FEATURES**

- **Standard: tube packing and without "locating pegs"**
- Assures reliable PC Board connections
- Fine pitch, low profile type with 0.30mm square pin
- Mate with female header BS2-xxx-H222-55/00X then "board to board" distance 3.60mm

**PCB Surface Mount Layout**



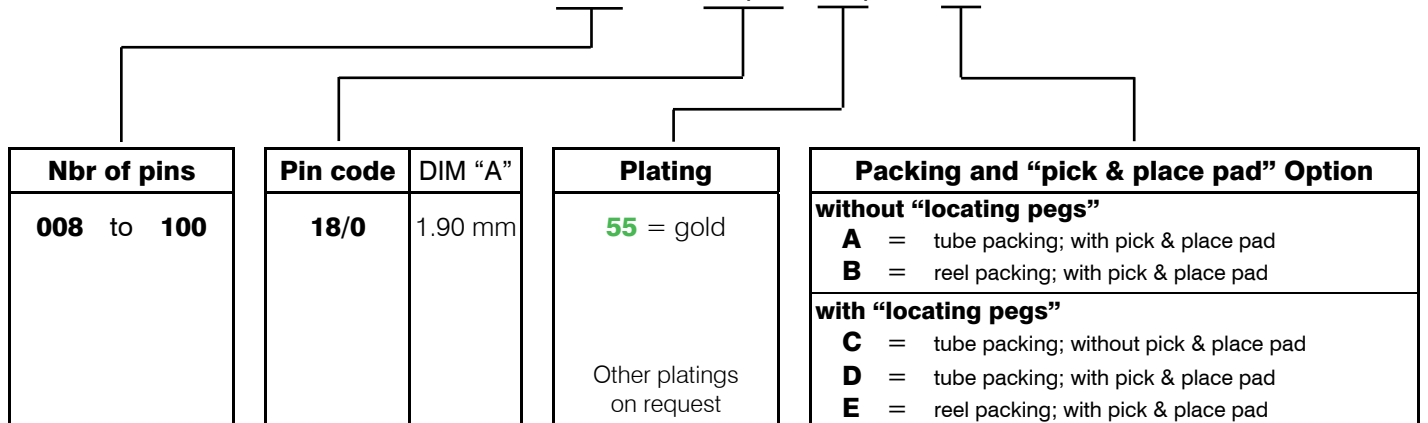
**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	100 MΩ min.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

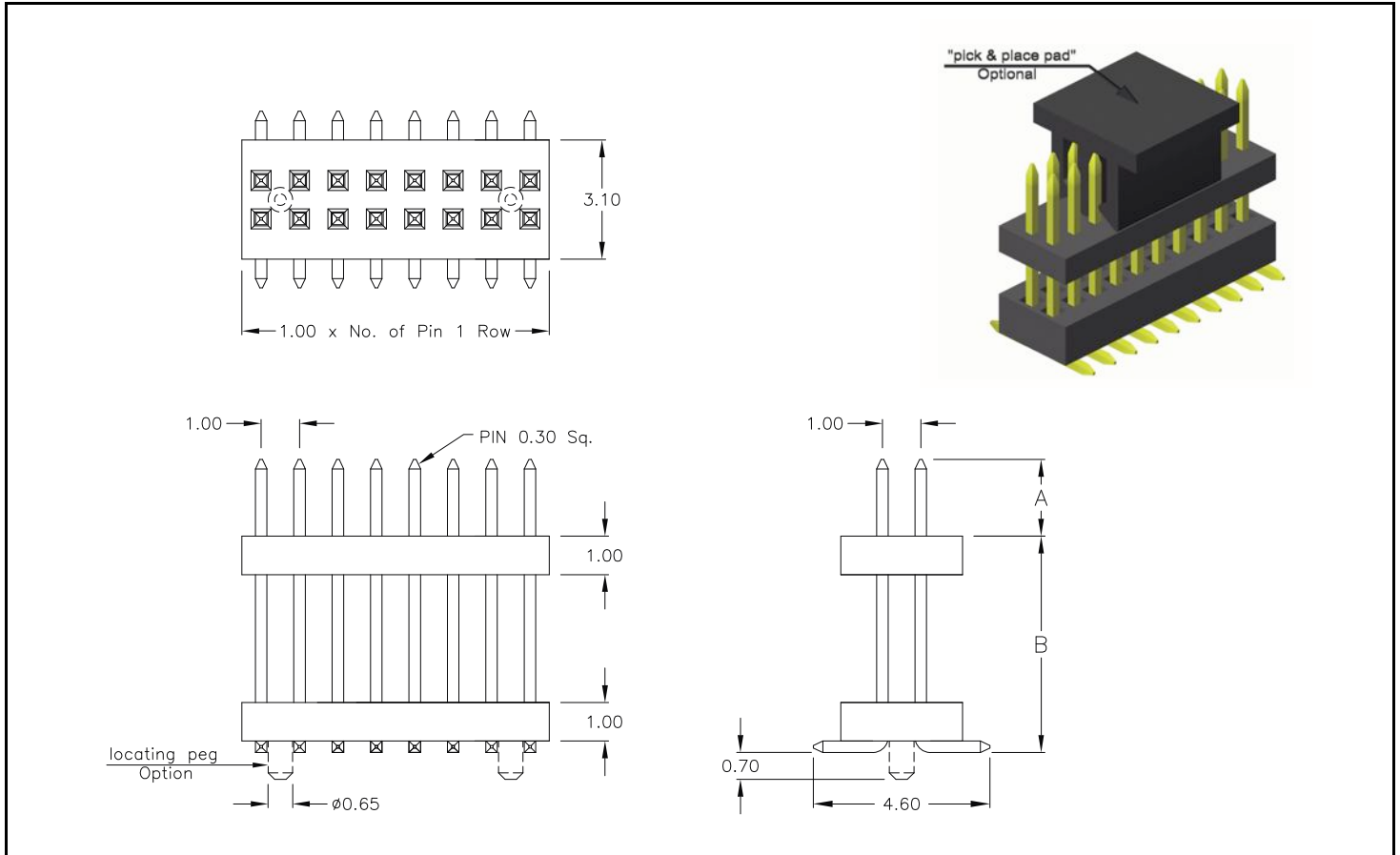
**How to order**

SS2 - xxx - H 18/x - 55/ 00 X



# 1.00mm pitch Board Spacer

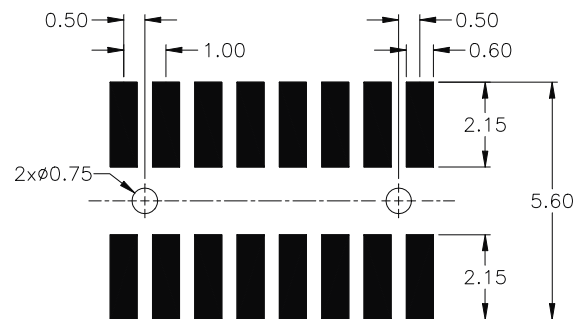
- SMT - dual row



## SPECIFICATIONS

Current rating	1 A
Insulator resistance	100 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 5sec.
Contact material (RoHS compliant)	Copper alloy
Insulator material (RoHS compliant)	Nylon UL 94 V-0

## PCB Surface Mount Layout

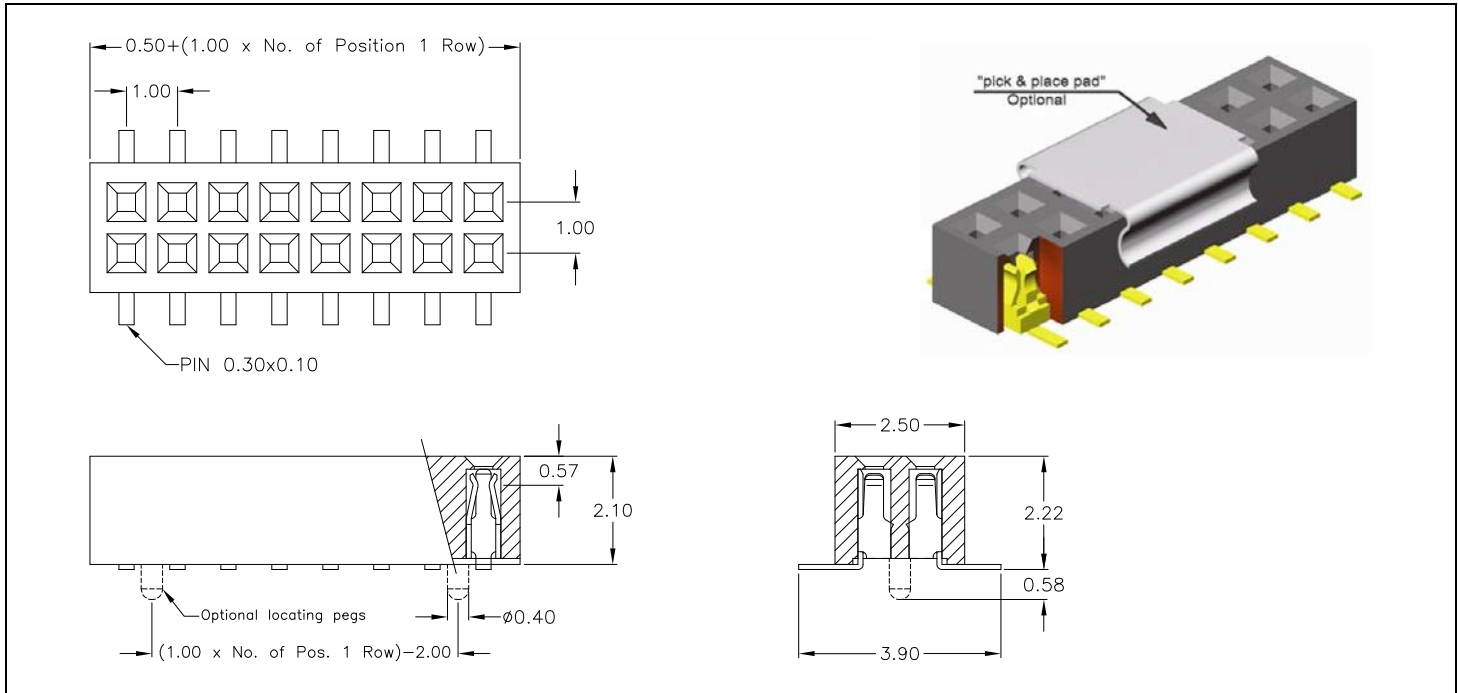


## How to order

SP2 - xxx - H 51/x - 55 /00 X

Nbr of pins	Pin code	DIM "A"	DIM "B"	Plating	Packing and "pick & place pad" Option
008 to 100	51/0	2.00 mm	7.80 mm	55 = gold	without "locating pegs" A = tube packing; with pick & place pad B = reel packing; with pick & place pad
	Other dimensions on request			Other platings on request	with "locating pegs" C = tube packing; without pick & place pad D = tube packing; with pick & place pad E = reel packing; with pick & place pad

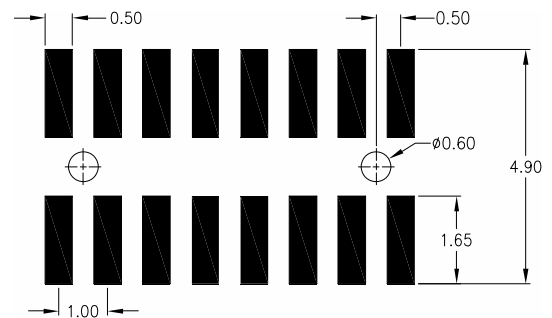
1.00mm pitch Female Header  
 - SMT - low profile dual row



**APPLICATION AND FEATURES**

- **Standard: tube packing, without "locating pegs" and without "pick & place pad"**
- Assures reliable PC Board connections
- Fine pitch, low profile for space saving Application
- Accept 0.30mm square Pin Header

**PCB Surface Mount Layout**

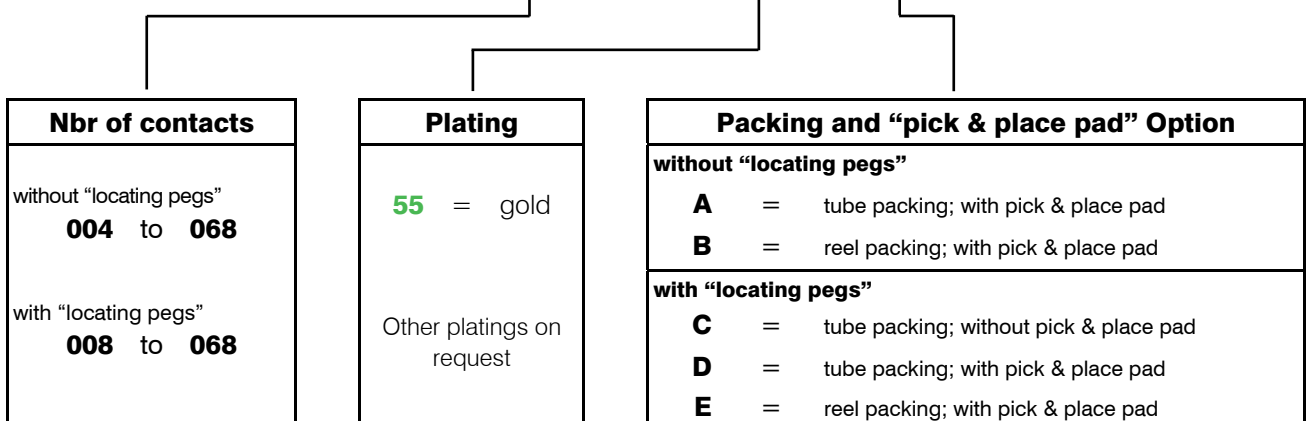


**SPECIFICATIONS**

Current rating	1 A	Operating temperature	-40°C to +105°C
Insulator resistance	100 MΩ min.	Processing temperature	+250°C +0/-5°C for 10sec.
Contact resistance	20 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	500 V AC	Insulator material	LCP UL 94 V-0 (RoHS compliant)

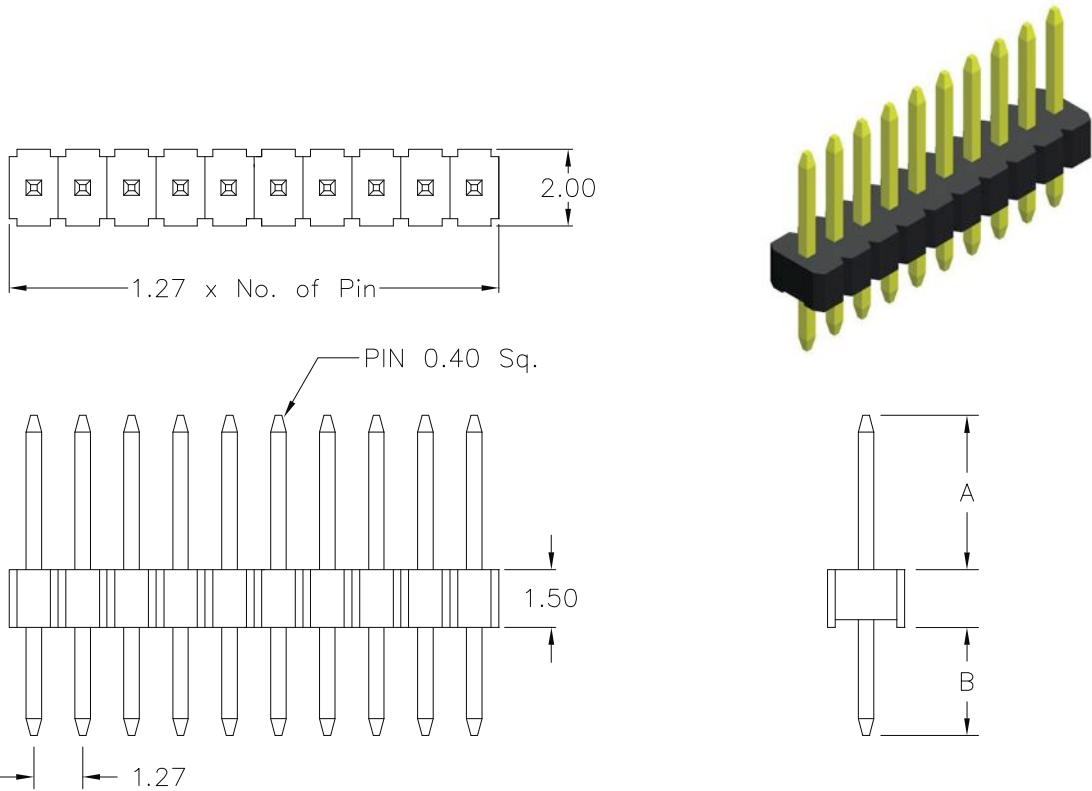
**How to order**

BS2 - xxx - H222 - 55 /00 X





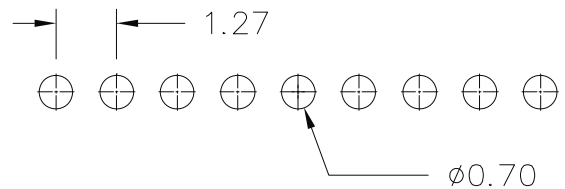
1.27mm pitch Pin Header  
 - THT - single row straight



**SPECIFICATIONS**

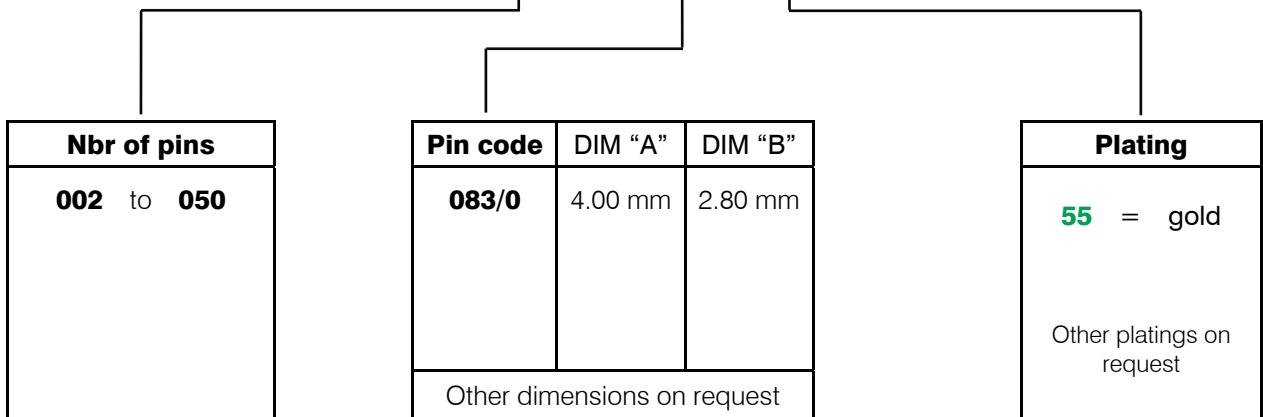
Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

**PCB Hole Layout**

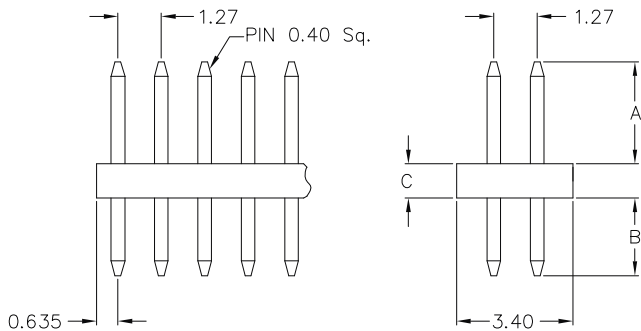
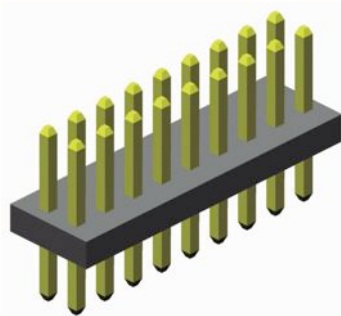


How to order

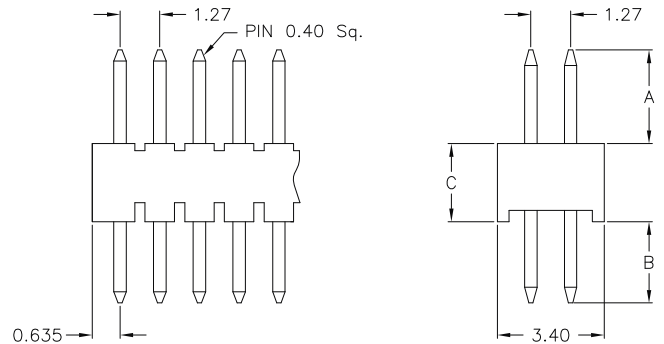
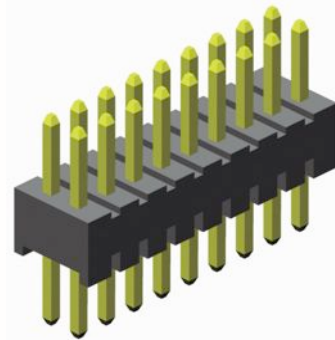
SL 1 - xxx - B xxx/x - 55 / 11



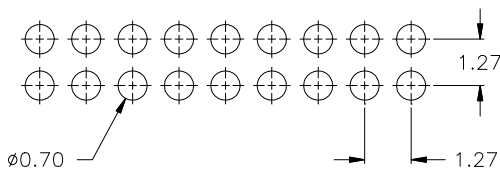
S063/x & S064/x style



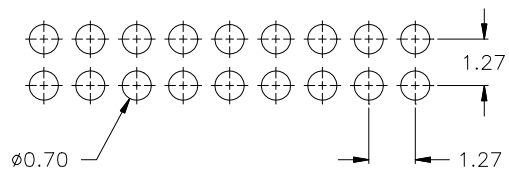
S081/x style



PCB Hole Layout



PCB Hole Layout



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

How to order

SL 2 - xxx - S xxx/x - 55 / 11

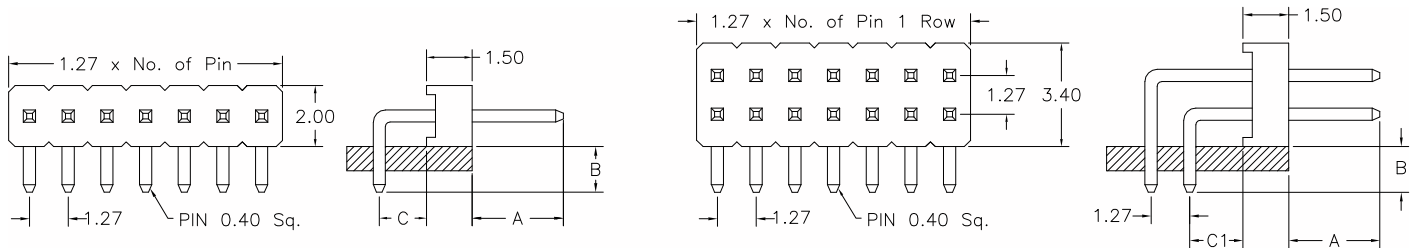
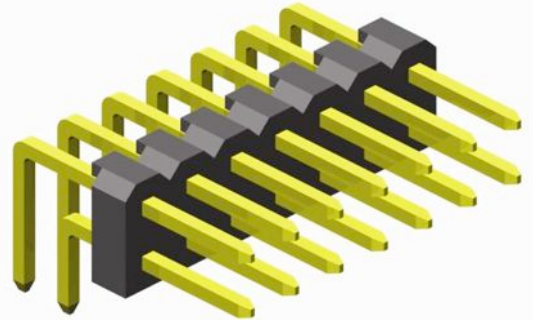
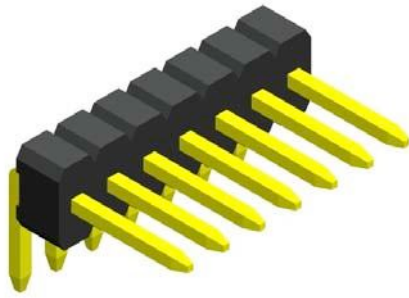
Nbr of pins
006 to 100

Pin code	DIM "A"	DIM "B"	DIM "C"
063/1	3.00 mm	2.30 mm	1.00 mm
063/2	7.00 mm	2.30 mm	1.00 mm
063/3	5.00 mm	2.30 mm	1.00 mm
063/4	3.10 mm	1.90 mm	1.00 mm
063/5	2.80 mm	2.50 mm	1.00 mm
064/0	7.50 mm	5.00 mm	1.50 mm
Insulator thickness 2.00mm on request.			
081/1	3.00 mm	2.60 mm	2.50 mm
081/2	4.00 mm	2.60 mm	2.50 mm
Other dimensions on request			

Plating
55 = gold
Other platings on request

# 1.27mm pitch Pin Header

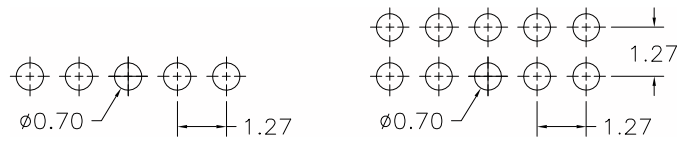
- THT - single & dual row right angle



## SPECIFICATIONS

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

## PCB Hole Layout

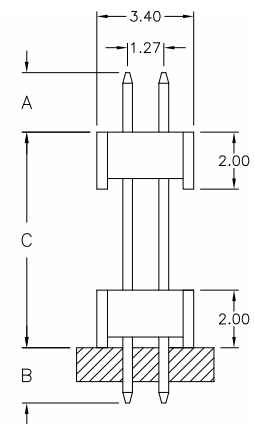
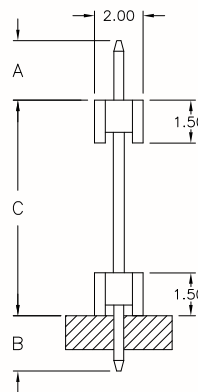
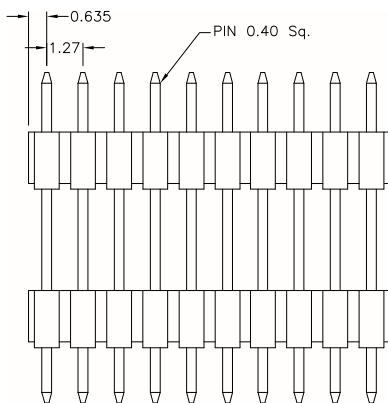


## How to order

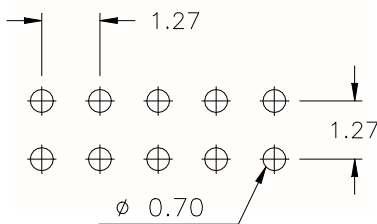
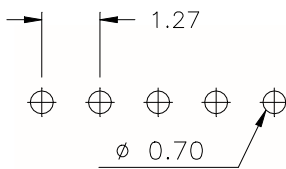
SL x - xxx - R xxx/x - 55 / 11

Rows	Nbr of pins	Pin code	DIM "A"	DIM "B"	DIM "C" (1 row)	DIM "C1" (2 row)	Plating
1 = single row	002 to 050	071/0	3.80 mm	3.00 mm	1.50 mm	1.70 mm	55 = gold
		071/1	4.80 mm	2.50 mm	0.80 mm	1.00 mm	
		071/2	3.00 mm	3.00 mm	1.50 mm	1.70 mm	
		071/3	3.80 mm	4.50 mm	1.50 mm	1.70 mm	
		071/4	3.80 mm	1.60 mm	1.50 mm	1.70 mm	
		071/5	3.00 mm	2.80 mm	1.50 mm	1.70 mm	
2 = dual row	006 to 100	071/6	4.00 mm	4.00 mm	1.50 mm	1.70 mm	Other platings on request
		Other dimensions on request					

1.27mm pitch Board Spacer  
- THT - single & dual row



**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	Copper alloy <i>(RoHS compliant)</i>
Insulator material	Nylon UL 94 V-0 <i>(RoHS compliant)</i>

Pin code	DIM "A"	DIM "B"	DIM "C"
<b>162/1</b>	5.70 mm	5.70 mm	4.80 mm
<b>179/0</b>	5.85 mm	5.85 mm	6.15 mm
<b>130/2</b>	3.70 mm	2.30 mm	7.00 mm
<b>130/3</b>	3.00 mm	3.00 mm	7.00 mm
<b>150/2</b>	4.00 mm	3.00 mm	8.00 mm
<b>127/1</b>	2.20 mm	2.20 mm	8.30 mm
<b>152/2</b>	3.60 mm	2.60 mm	9.00 mm
<b>180/3</b>	4.00 mm	4.00 mm	10.00 mm
<b>205/1</b>	3.00 mm	6.50 mm	11.00 mm
<b>190/1</b>	3.00 mm	3.00 mm	13.00 mm
<b>220/1</b>	6.00 mm	3.00 mm	13.00 mm
<b>200/1</b>	3.00 mm	3.00 mm	14.00 mm
<b>230/1</b>	3.00 mm	6.00 mm	14.00 mm
<b>210/4</b>	3.50 mm	3.00 mm	14.50 mm
<b>230/2</b>	3.00 mm	3.00 mm	17.00 mm
<b>244/2</b>	4.00 mm	3.00 mm	17.40 mm
<b>265/1</b>	4.60 mm	3.00 mm	18.90 mm

Other dimensions on request


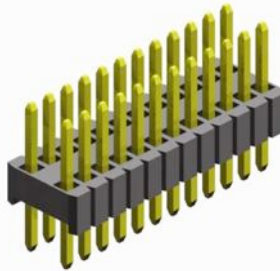
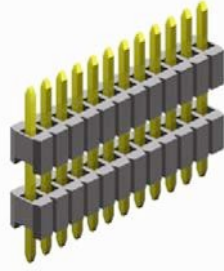
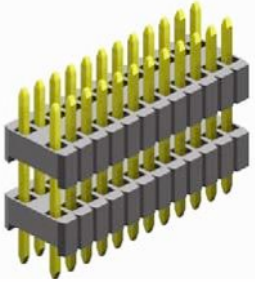
How to order

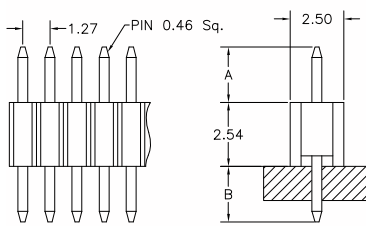
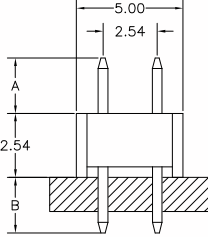
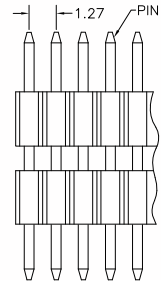
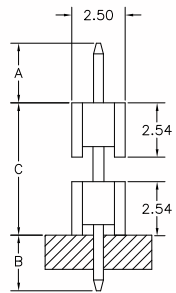
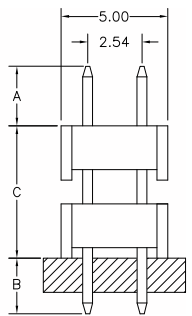
SP x - xxx - S xxx/x - 55 /11

Rows	Nbr of pins	Pin code	Plating
<b>1</b> = single row	<b>003</b> to <b>050</b>	dimension and others see above table	<b>55</b> = gold
<b>2</b> = dual row	<b>006</b> to <b>100</b>		Other platings on request

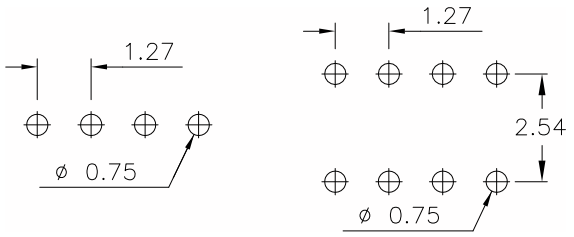
1.27mm Pin Header & Board Spacer  
 1.27mm x 2.54mm Board Spacer



SL 1
SL 2
SP 1
SP 2

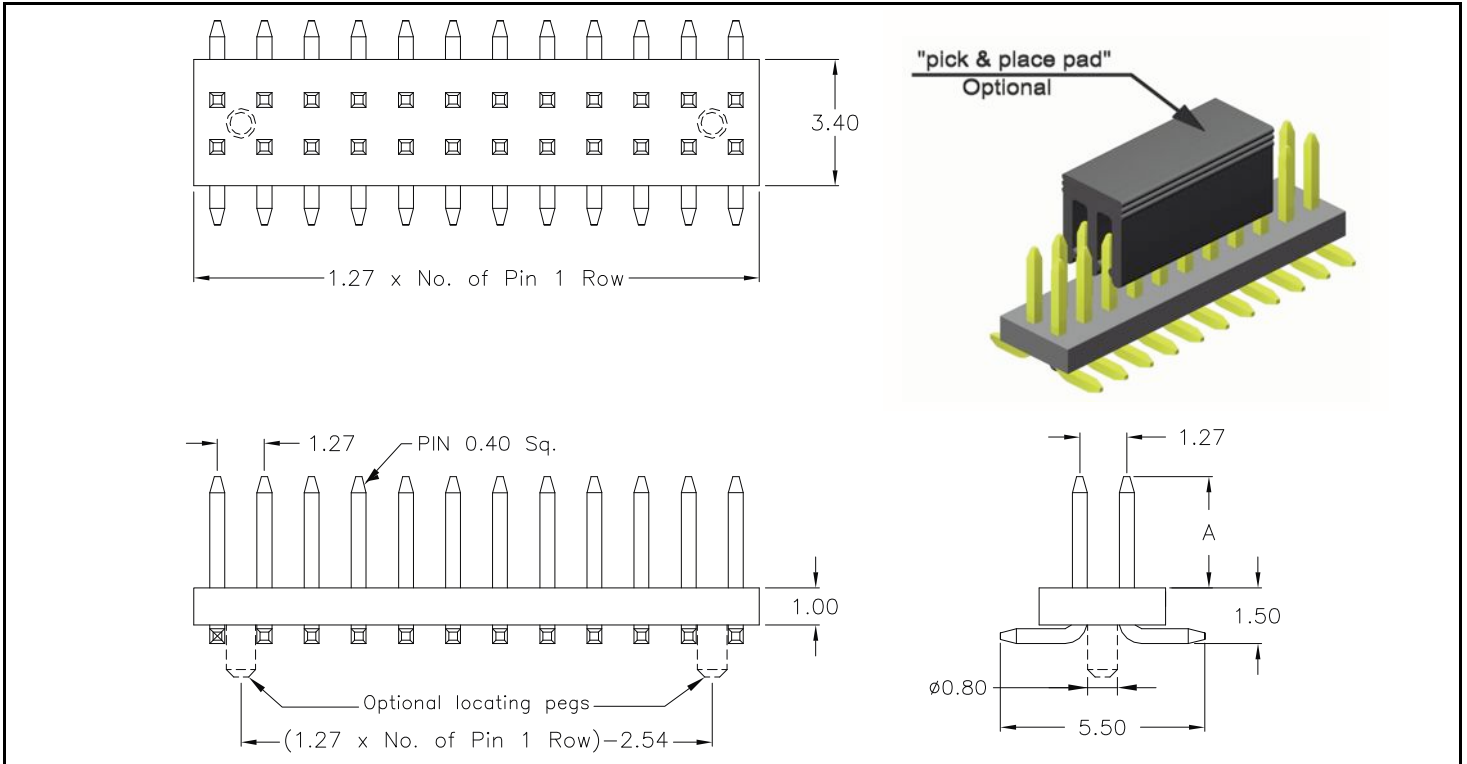
SPECIFICATIONS		PCB Hole Layout	
Current rating	1 A		
Insulator resistance	1000 MΩ min.		
Withstanding voltage	500 V AC		
Operating temperature	- 40°C to +105°C		
Contact material (RoHS compliant)	Copper alloy		
Insulator material (RoHS compliant)	Nylon, UL 94 V-0		

How to order

S xx - xxx - S xxx/xx - 55 /1

Single plastic	Nbr of pins	Pin code	DIM "A"	DIM "B"	Plating
<b>L1</b> = single row	single row = <b>003</b> to <b>050</b>	<b>079/01</b>	2.80 mm	2.60 mm	<b>55</b> = gold  Other platings on request
<b>L2</b> = dual row	dual row = <b>006</b> to <b>100</b>	<b>091/01</b>	4.00 mm	2.60 mm	
		<b>111/01</b>	6.00 mm	2.60 mm	
		<b>164/01</b>	2.50 mm	11.40 mm	
		Other dimensions on request			
Double plastic "Boardspacer"	Nbr of pins	Pin code	DIM "A"	DIM "B"	DIM "C"
<b>P1</b> = single row	single row = <b>003</b> to <b>050</b>	<b>084/01</b>	1.10 mm	1.30 mm	6.00 mm
<b>P2</b> = dual row	dual row = <b>006</b> to <b>100</b>	<b>116/01</b>	2.80 mm	2.60 mm	6.20 mm
		<b>152/01</b>	6.00 mm	3.00 mm	6.20 mm
		<b>127/01</b>	2.20 mm	2.20 mm	8.30 mm
		<b>137/01</b>	3.00 mm	2.30 mm	8.40 mm
		<b>160/06</b>	3.00 mm	4.00 mm	9.00 mm
		<b>210/06</b>	5.50 mm	2.50 mm	13.00 mm
		<b>218/01</b>	6.00 mm	1.80 mm	14.00 mm
		Other dimensions on request			

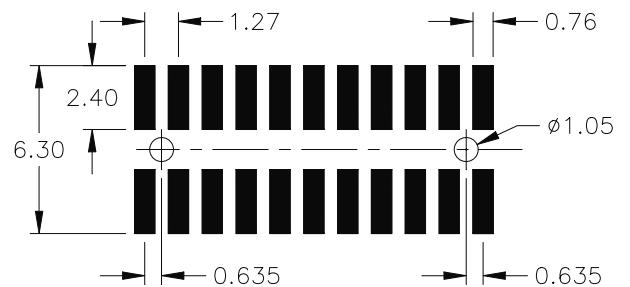
1.27mm pitch Pin Header  
 - SMT - low profile dual row



**APPLICATION AND FEATURES**

- **Standard: tube packing and without "locating pegs"**
- Assures reliable PC Board connections
- Low profile insulator
- Mates with 1.27mm pitch Female Headers

**PCB Surface Mount Layout**



**SPECIFICATIONS**

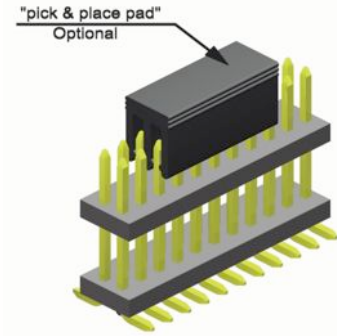
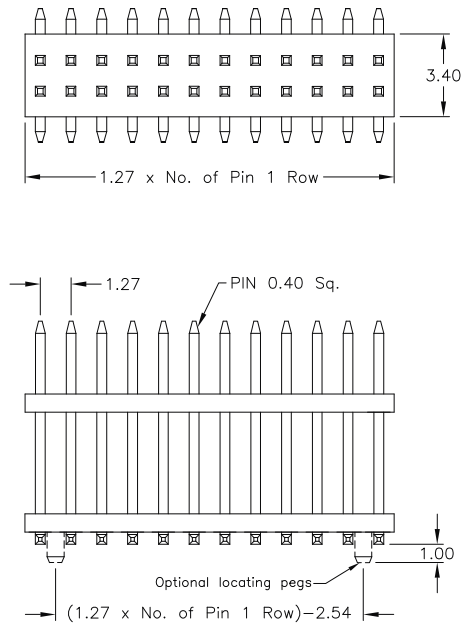
Current rating 1 A  
 Insulator resistance 1000 MΩ min.  
 Withstanding voltage 500 V AC

Operating temperature -40°C to +105°C  
 Processing temperature +250°C +0/-5°C for 10sec.  
 Contact material (RoHS compliant) Copper alloy  
 Insulator material (RoHS compliant) Nylon UL 94 V-0

**How to order**

**SS2 - xxx - H xx/x - 55 /11 X**

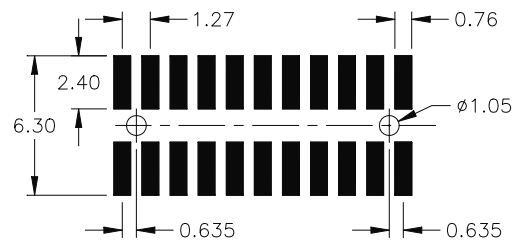
Nbr of pins	Pin code	DIM "A"	Plating	Packing and "pick & place pad" Option
without locating pegs: <b>006 to 100</b>	<b>70/0</b>	3.00 mm	<b>55</b> = gold	<b>without "locating pegs"</b> <b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
with locating pegs: <b>008 to 100</b>	<b>70/1</b>	10.00 mm	Other platings on request	<b>with "locating pegs"</b> (available only from 008 to 100 pins) <b>C</b> = tube packing; without pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad
	<b>70/2</b>	6.50 mm		
	Other dimensions on request			



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 5sec.
Contact material	Copper alloy (RoHS compliant)
Insulator material	Nylon UL 94 V-0 (RoHS compliant)

**PCB Surface Mount Layout**



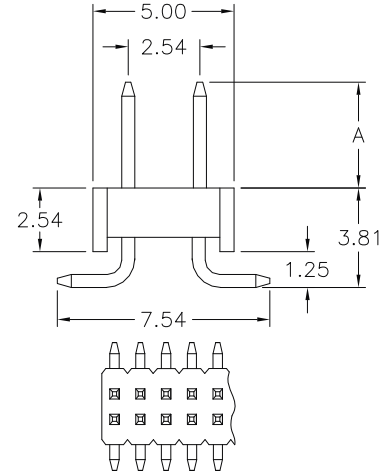
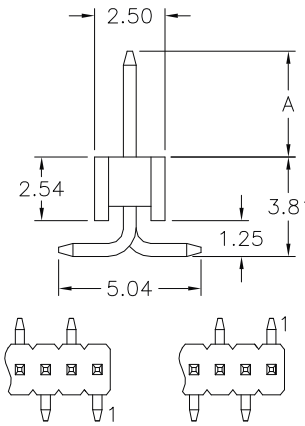
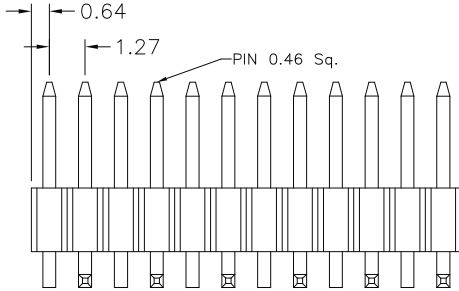
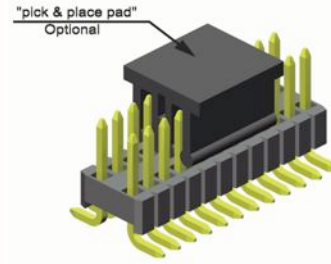
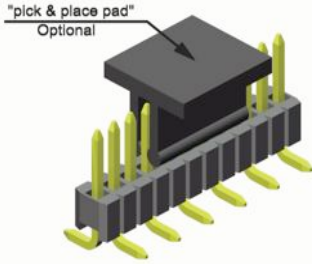
**How to order**

SP2 - xxx - H xx/x - 55 /11 X

Nbr of pins	Pin code	DIM "A"	DIM "B"	Plating	Packing and "pick & place pad" Option
without "locating pegs"	<b>21/9</b>	4.10 mm	2.90 mm	<b>55</b> = gold	<b>without "locating pegs"</b> <b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
<b>006 to 100</b>	<b>22/9</b>	5.20 mm	3.80 mm		
with "locating pegs"	<b>21/1</b>	3.00 mm	4.00 mm	Other platings on request	<b>with "locating pegs"</b> (available only from 008 to 100 pins) <b>C</b> = tube packing; without pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad
	<b>22/8</b>	1.50 mm	4.40 mm		
	<b>22/3</b>	5.00 mm	4.50 mm		
	<b>21/2</b>	3.00 mm	5.50 mm		
	<b>22/5</b>	6.00 mm	5.50 mm		
	<b>21/0</b>	3.00 mm	6.00 mm		
	<b>22/0</b>	3.00 mm	7.00 mm		
	<b>22/2</b>	4.70 mm	7.10 mm		
	<b>22/4</b>	4.00 mm	7.50 mm		
	<b>21/8</b>	4.80 mm	7.50 mm		
	<b>23/0</b>	6.10 mm	7.50 mm		
	<b>21/3</b>	5.60 mm	8.00 mm		
	<b>21/7</b>	4.00 mm	8.30 mm		
	<b>21/5</b>	3.00 mm	9.00 mm		
	<b>21/4</b>	3.80 mm	9.65 mm		
	<b>22/1</b>	5.10 mm	10.20 mm		
	<b>22/6</b>	3.00 mm	11.50 mm		
	<b>22/7</b>	3.00 mm	14.00 mm		
<b>21/6</b>	3.00 mm	16.00 mm			
Other dimensions on request					

1.27mm - SMT - Pin Header

dual row 1.27mm x 2.54mm

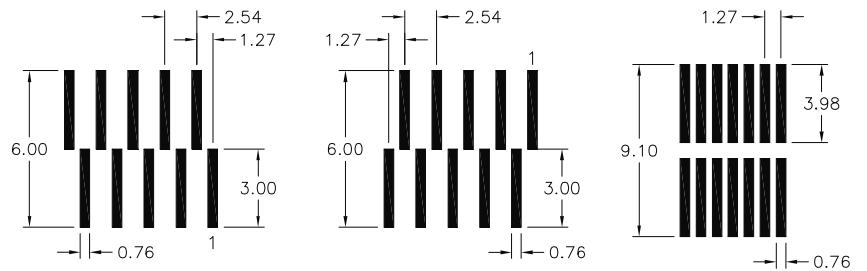


Foot style: **380**      **381**      **380**

**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 5sec.
Contact material (RoHS compliant)	Brass
Insulator material (RoHS compliant)	Nylon UL 94 V-0

**PCB Surface Mount Layout**



Foot style: **380** (single row)      **381** (single row)      **380** (dual row)

**How to order**

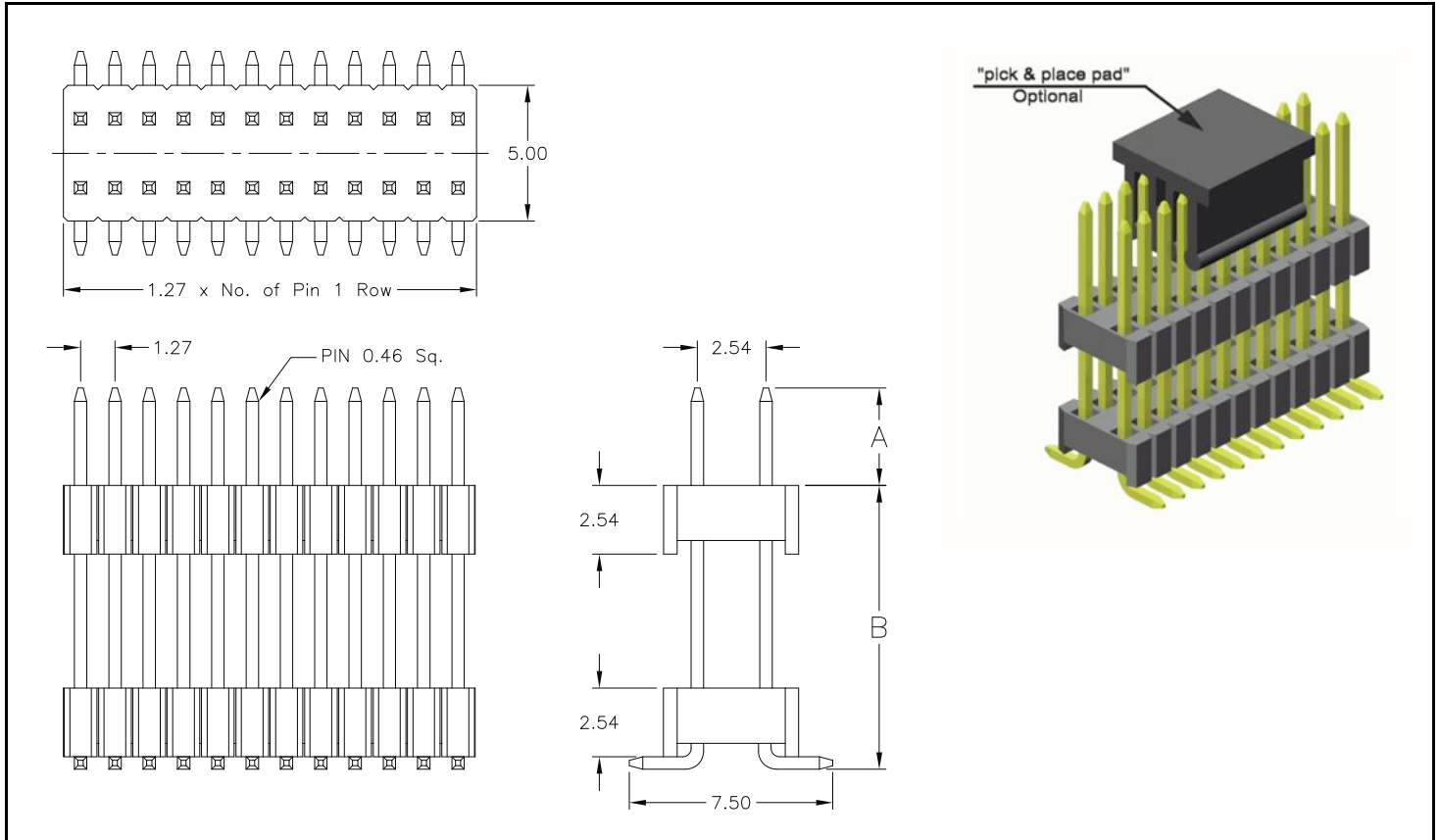
SS x - xxx - H xxx / x - 55 / 1 X

Rows	Nbr of pins	Foot style	Pin code	DIM "A"	Plating	Packing and "pick & place pad" Option
1 = single row	003 to 050	380	/ 0	2.80 mm	55 = gold	<b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
		381	/ 0	2.80 mm		
2 = dual row	006 to 100	380	/ 0	2.80 mm	Other platings on request	
		380	/ 1	4.50 mm		
		380	/ 2	5.50 mm		
		380	/ 3	4.80 mm		
		Other dimensions on request				



1.27mm x 2.54mm Board Spacer

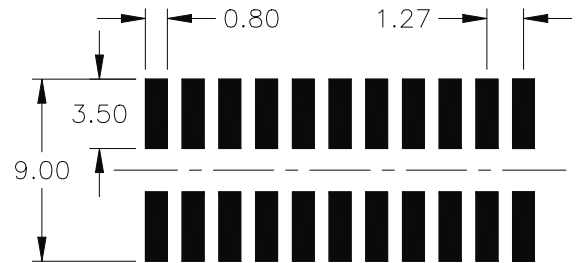
- SMT - dual row



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 5sec.
Contact material (RoHS compliant)	Brass
Insulator material (RoHS compliant)	Nylon UL 94 V-0

**PCB Surface Mount Layout**



**How to order**

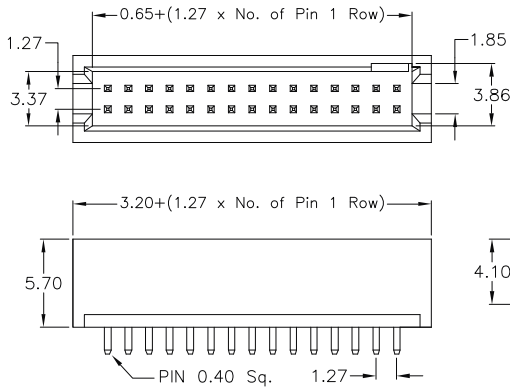
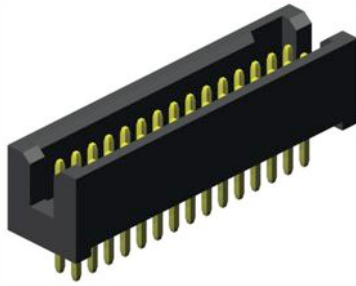
SP2 - xxx - H 220/x - 55 /1 X

<b>Nbr of pins</b>	<b>Pin code</b>	<b>DIM "A"</b>	<b>DIM "B"</b>	<b>Plating</b>	<b>Packing and "pick &amp; place pad" Option (standard tube packing; without pick &amp; place pad)</b>
	<b>006 to 100</b>	<b>220/0</b>	5.60 mm		
	<b>220/1</b>	5.60 mm	9.75 mm	Other platings on request	<b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
	<b>220/2</b>	3.40 mm	12.20 mm		
	Other dimensions on request				

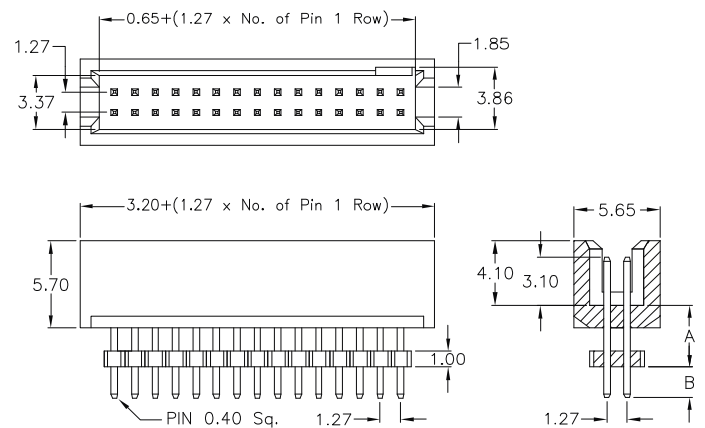
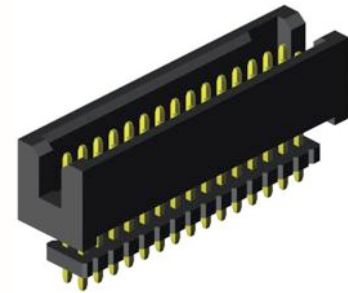
1.27mm pitch Box Header  
 - THT - straight - raised



**S 535** Style



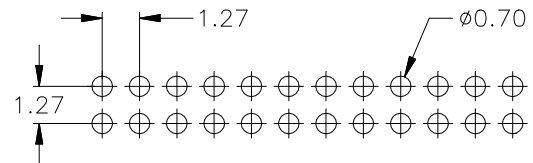
**P 535** Style



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

**PCB Hole Layout**



**Application and Features**

Mating with 1.27mm pitch Female Headers,  
 Reliable flat cable to PCB connection, or as "board to board" connection.  
 No ejection latches for space saving.

How to order

SLS - xxx - X xxx - 55 /11

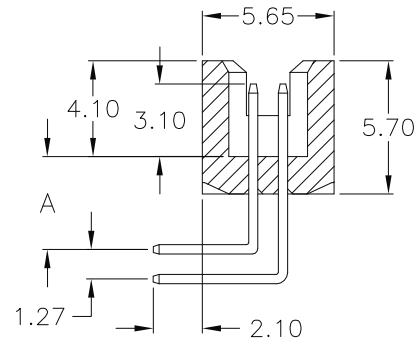
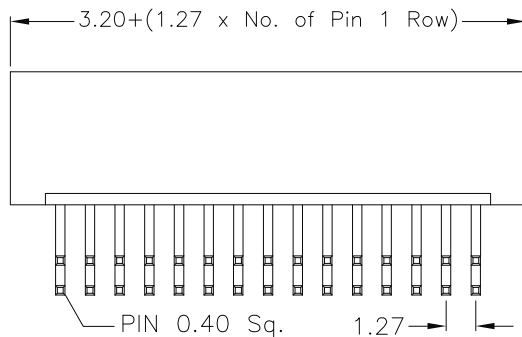
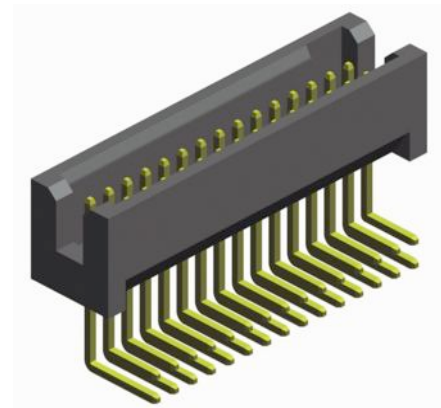
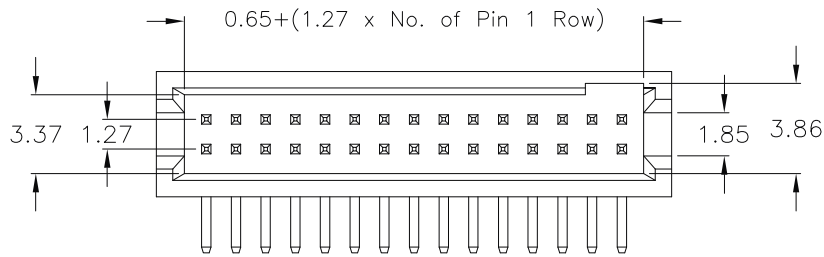
Nbr of pins
010 to 100

Style	DIM "A"	DIM "B"
straight standard <b>S 535</b>		2.40 mm
straight raised <b>P 535/0</b>	16.00 mm	2.40 mm
<b>P 535/1</b>	12.40 mm	2.40 mm
Other dimensions on request		

Plating
<b>55</b> = gold
Other platings on request

1.27mm pitch Box Header

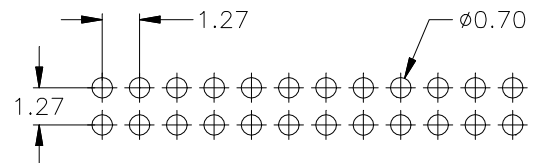
- THT - right angle



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

**PCB Hole Layout**



**APPLICATION AND FEATURES**

Mating with 1.27mm pitch Female Headers,  
 Reliable flat cable to PCB connection.  
 No ejection latches for space saving.

How to order

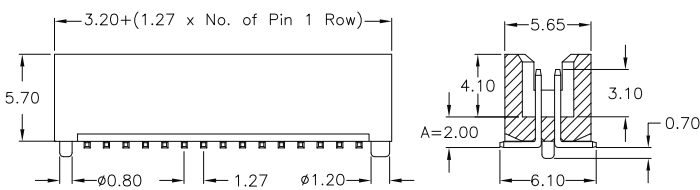
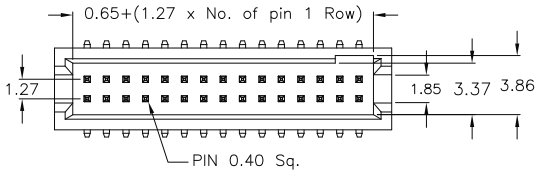
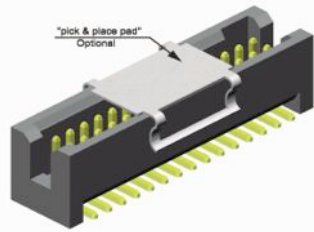
SLS - xxx - R xxx/x - 55 /11

Nbr of pins
010 to 100

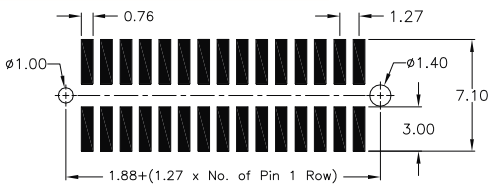
Pin code	DIM "A"
565/0 (standard)	2.10 mm
565/1	3.70 mm
Other dimensions on request	

Plating
55 = gold
Other platings on request

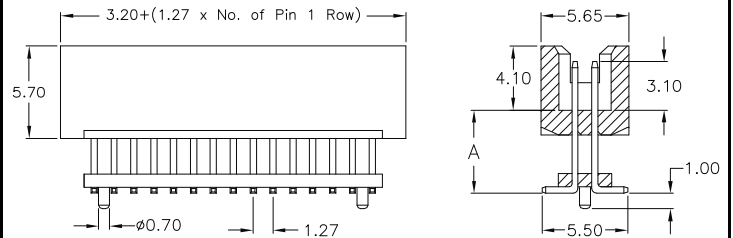
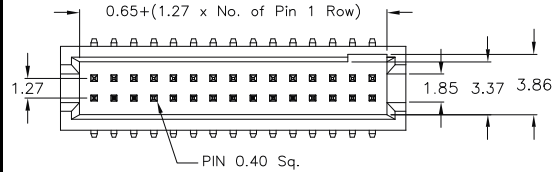
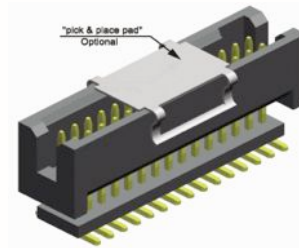
**H 610** Style



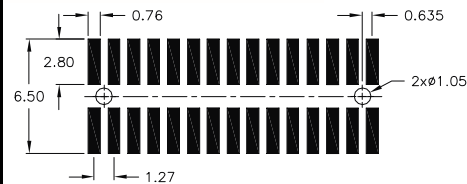
PCB Surface Mount Layout



**HP xx** Style



PCB Surface Mount Layout



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 5sec.
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

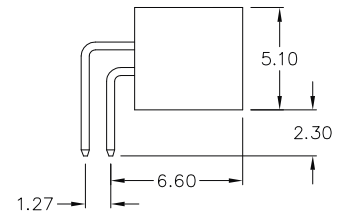
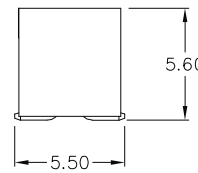
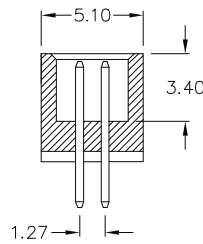
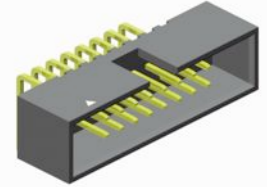
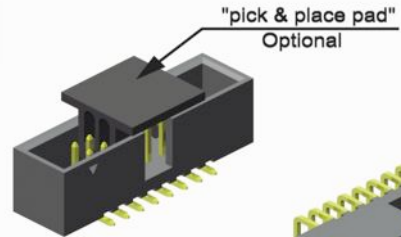
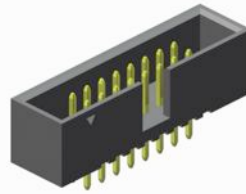
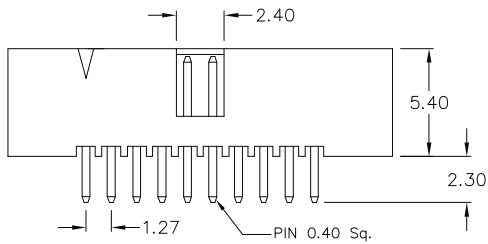
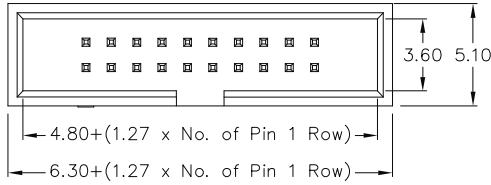
**APPLICATION AND FEATURES**

Mating with 1.27mm pitch Female Headers,  
 Reliable flat cable to PCB connection, or as "board to board" connection  
 No ejection latches for space saving

How to order

SLS - xxx - Xxxx - 55 /11 X

Nbr of pins	Style	Plating	Packing and "pick & place pad" Option
010 to 100	<b>H610</b> Low Profile DIM "A" = 2.00 mm	55 = gold  Other platings on request	<b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
	Raised Type DIM "A"		
	<b>HP20</b> 15.00 mm (standard)		
	<b>HP21</b> 18.00 mm		
	<b>HP22</b> 8.50 mm		
<i>Other dimensions on request</i>			



S 510

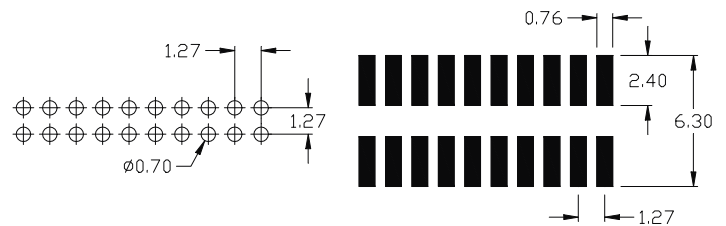
H 510

R 510

**APPLICATION AND FEATURES**

- **Standard:**  
tray packing for S510 & R510 Style  
tube packing for H510 Style
- Designed to mate with IDC female connector IDS-xxx-W050-55/P
- Reliable flat cable to PCB connection
- No ejection latches for space saving

**PCB Hole and Surface Mount Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC

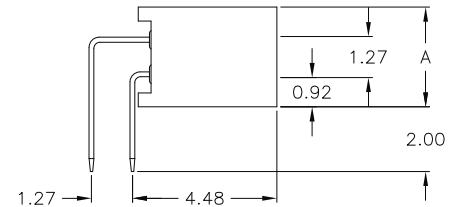
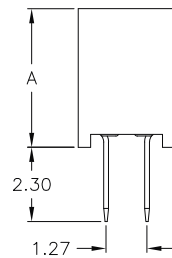
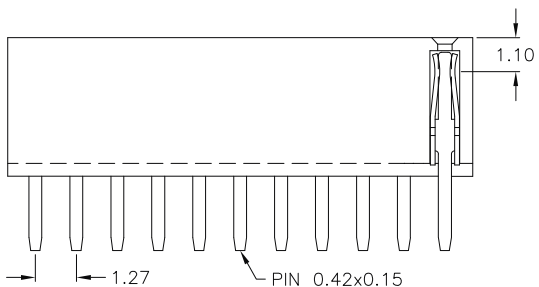
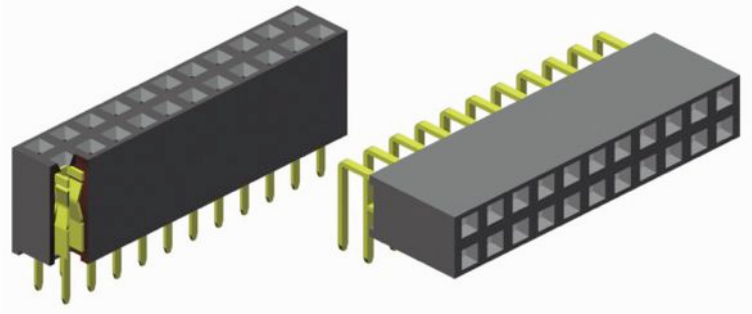
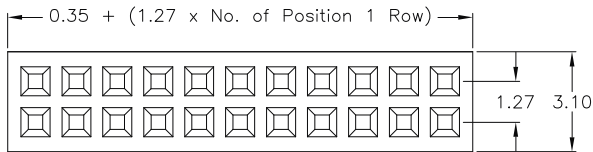
Operating temperature	- 40°C to +105°C
Processing temperature (SMT)	+250°C +0/-5°C for 10sec.
Contact material (RoHS compliant)	Copper Alloy
Insulator material (RoHS compliant)	LCP UL 94 V-0

**How to order**

**SLS - xxx - X xxx - 55/11 ( X )**

Nbr of pins	Pin style	Plating	Option only for - H510 - Style
006; 008; 010; 012 014; 016; 020; 024 026; 030; 034; 036 040; 044; 050; 060 064; 066; 068; 080 100	S 510 = straight R 510 = right angle H 510 = SMT	55 = gold Other platings on request	A = tube packing; with pick & place pad B = reel packing; with pick & place pad

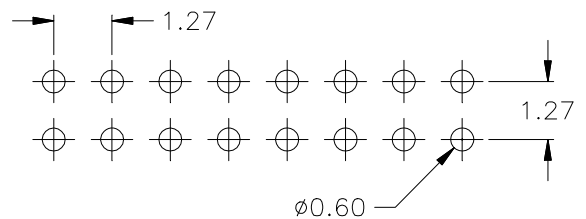
1.27mm pitch Female Header  
 - THT - dual row straight & right angle



**APPLICATION AND FEATURES**

- 3.40 or 4.40mm height above board straight type
- Hi-rel dual beam contact assures reliable PC-Board connections
- Accepts 0.40mm square pins
- Stand-off's facilitate post solder cleaning
- Side stackable

**PCB Hole Layout**



**SPECIFICATIONS**

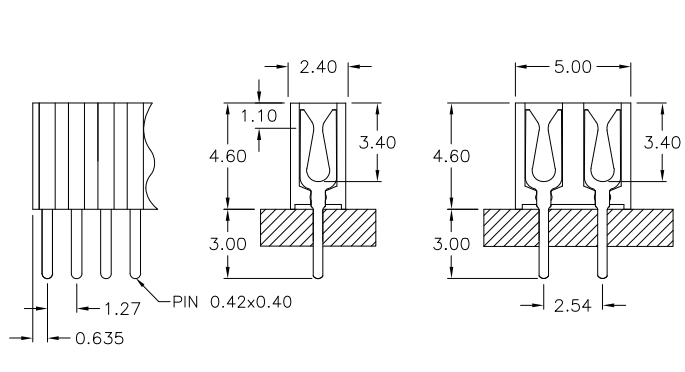
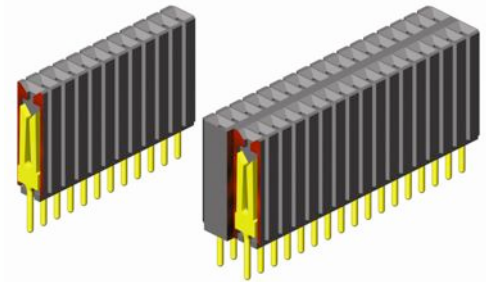
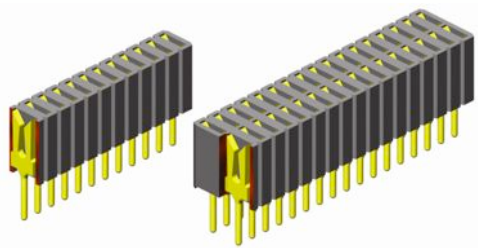
Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	20 mΩ max.	Insulator material	LCP (RoHS compliant) UL 94 V-0
Withstanding voltage	500 V AC		

How to order

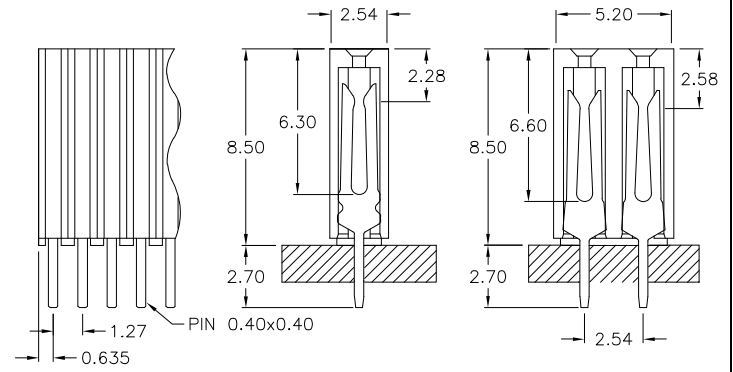
BL 2 - xxx - X xxx - 55 / 11

Nbr of contacts	Connector style	DIM "A"	Plating
006 to 100	S340 straight	3.40 mm	55 = gold Other platings on request
004 to 100	S430 straight	4.40 mm	
004 to 100	R430 right angle	3.10 mm	

1.27mm pitch Female Header  
 -THT- 1.27mm x 2.54mm dual row



**S 460**

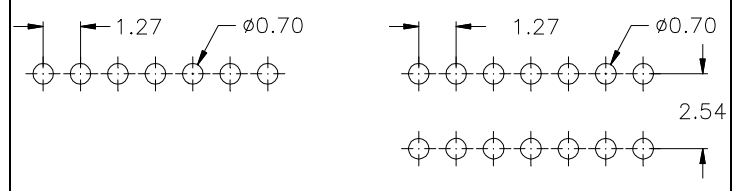


**S 850**

**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	Phosphor Bronze (RoHS compliant)
Insulator material	LCP UL 94 V-0 (RoHS compliant)

**PCB Hole Layout**



**APPLICATION AND FEATURES**

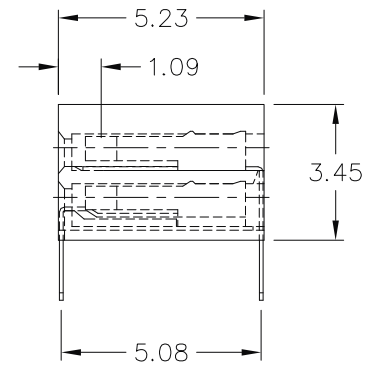
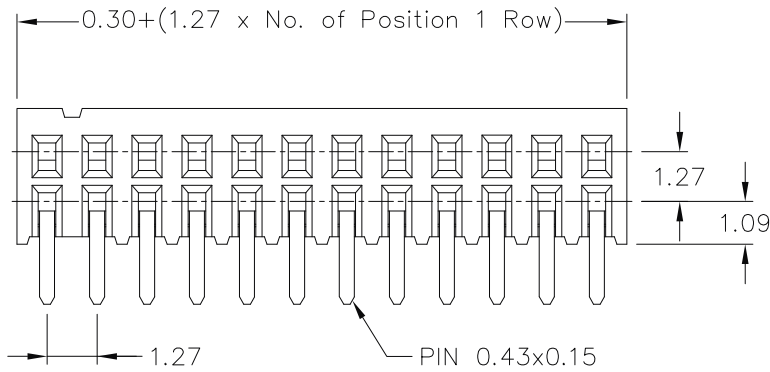
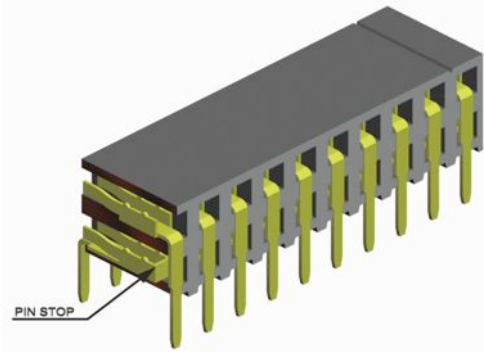
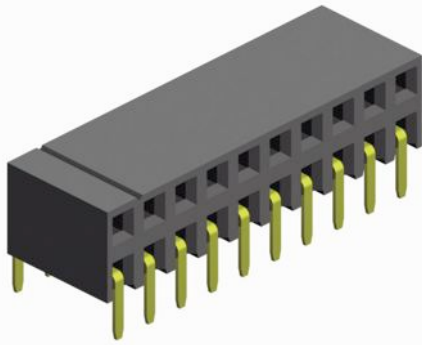
Standard & low profile types  
 Hi-rel fork contact design  
 Mates with 0.46mm square or round Pin Header

**How to order**

**BL x - xxx - S xxx - 55 /1**

Rows	Nbr of contacts	Version (height above board)	Plating
<b>1</b> = single row <b>2</b> = dual row	<b>version 460</b> single row = <b>003</b> to <b>040</b> dual row = <b>006</b> to <b>080</b>	<b>460</b> = 4.60 mm	<b>55</b> = gold  Other platings on request
	<b>version 850</b> single row = <b>003</b> to <b>035</b> dual row = <b>006</b> to <b>070</b>	<b>850</b> = 8.50 mm	

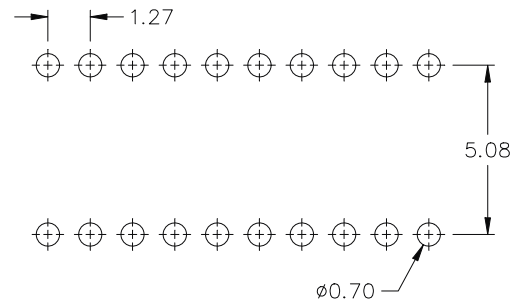
1.27mm pitch Female Header  
- THT- side entry



**APPLICATION AND FEATURES**

- **Standard: tube packing**
- Hi-rel dual beam contact assures reliable PC-Board connections
- Accepts 0.40mm square pins; Pin Header 1.27mm x 1.27mm
- 3.45mm height above board
- Stand-off's facilitate post solder cleaning

**PCB Hole Layout**

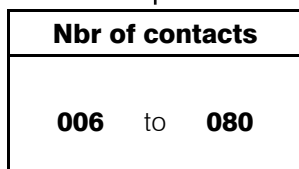


**SPECIFICATIONS**

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material (RoHS compliant)	Phosphor bronze
Contact resistance	20 mΩ max.	Insulator material (RoHS compliant)	Nylon UL 94 V-0
Withstanding voltage	500 V AC		

How to order

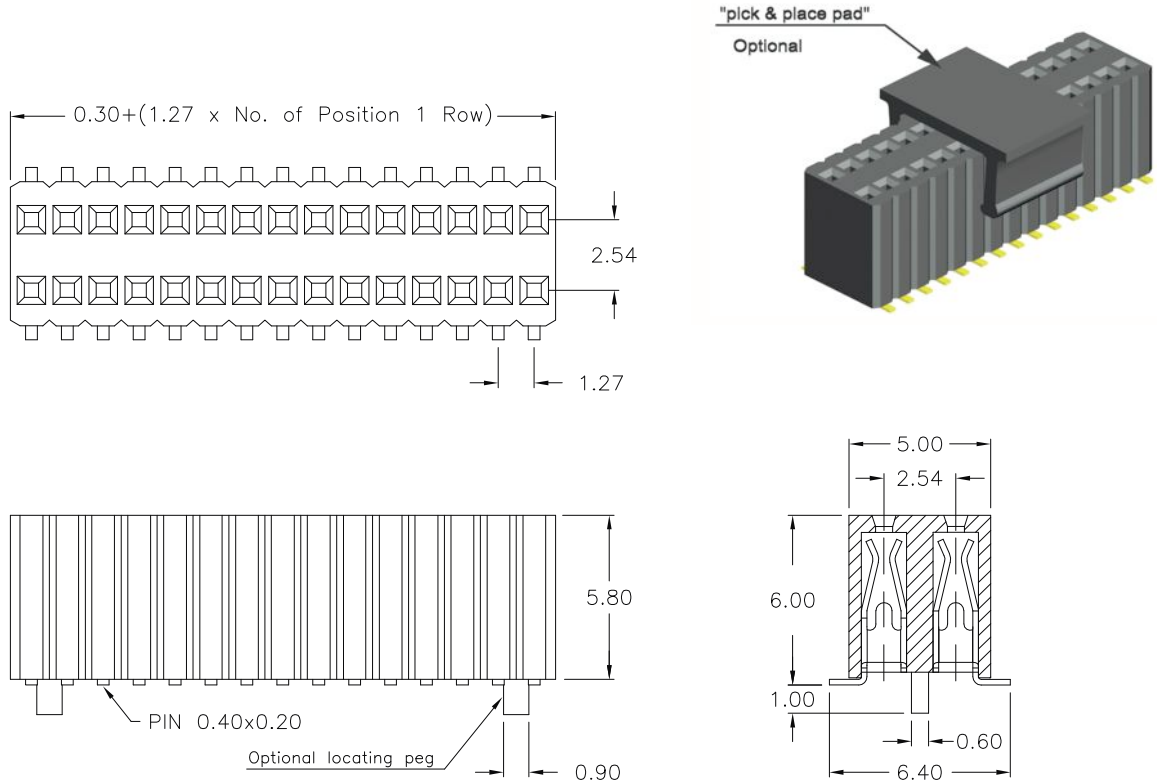
BH 2 - xxx - R 345 - 55 /11





# 1.27mm x 2.54mm pitch Female Header

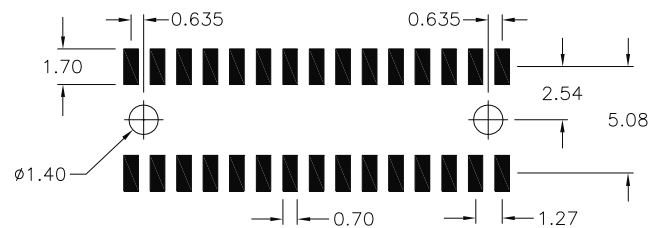
- SMT - dual row 6.00mm profile



## SPECIFICATIONS

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) Nylon UL 94 V-0

## PCB Surface Mount & Hole Layout



## APPLICATION AND FEATURES

**Standard: tube packing and without "pick & place pad"**

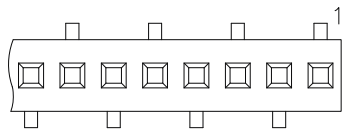
Hi-rel inner contact design, mates with 0.46mm square pin headers

### How to order

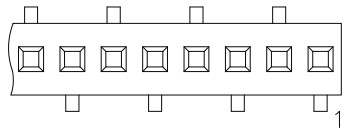
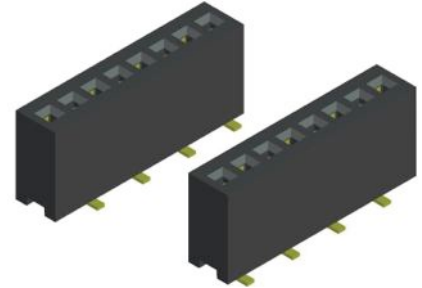
BS 2 - xxx - H 600 - 55 /1 X

Rows	Nbr of contacts	Plating	Packing and "pick & place pad" Option
2 = dual row	006 to 100	55 = gold	<b>without "locating pegs"</b> <b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad <b>with "locating pegs"</b> <b>C</b> = tube packing; without pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad

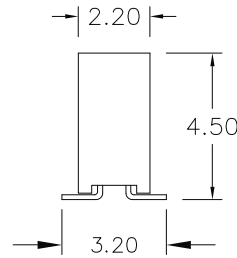
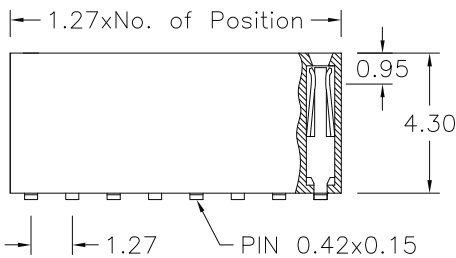
**Foot style**



**451**



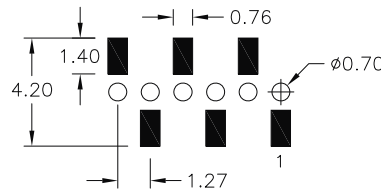
**450**



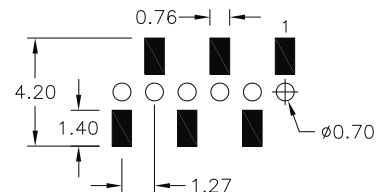
**APPLICATION AND FEATURES**

- **Standard: tube packing; without pick & place pad.**
- Also available with "pick & place pad" for automatic suck assembly to the PCB
- Low profile, 4.50mm height Type. Hi-rel dual beam contacts.
- Mating with 1.27mm pitch, 0.40mm square pin headers.
- Through Board mating possible

**PCB Surface Mount & Hole Layout**



Foot style: 450



451

**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material (RoHS compliant)	Phosphor Bronze
Insulator material (RoHS compliant)	LCP UL 94 V-0

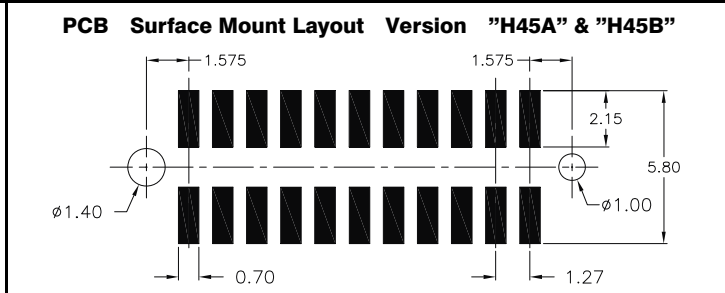
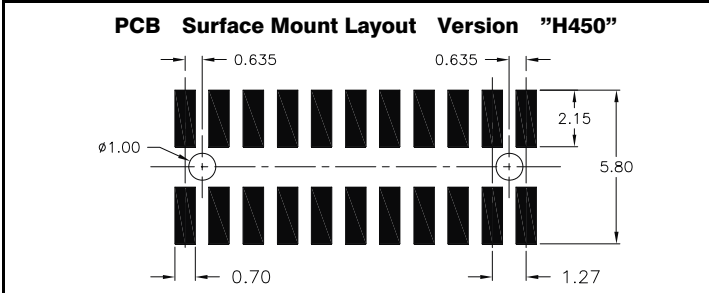
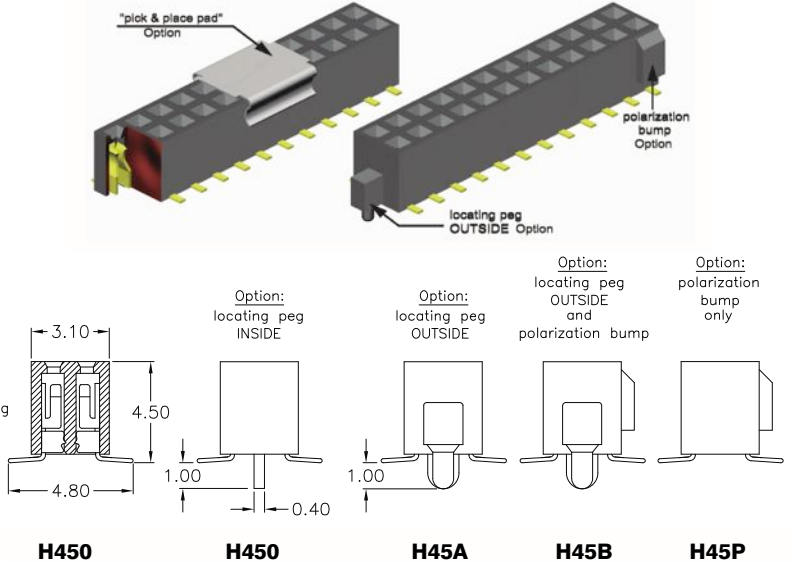
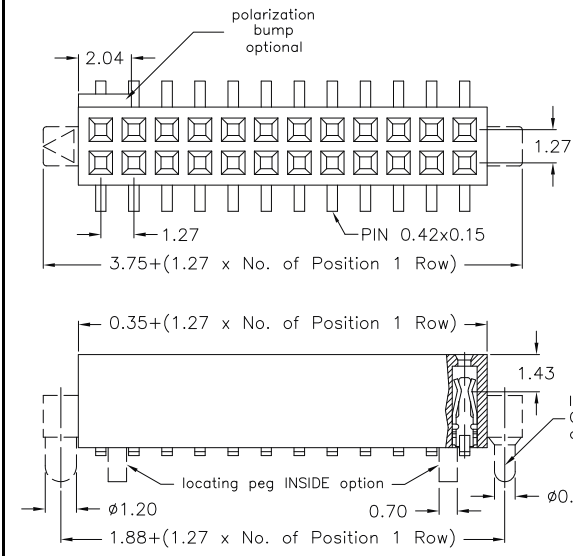
**How to order**

**BS 1 - xxx - H xxx - 55 /11 XX**

Nbr of contacts	Foot style	Plating	Packing and "pick & place pad" Option
<b>003 to 050</b>	<p><b>450</b> Pls. choose <b>450</b> style if odd pin count.</p> <p><b>451</b> Foot style see above detail</p>	<b>55</b> = gold	<p><b>A</b> = tube packing; with pick &amp; place pad</p> <p><b>B</b> = reel packing; with pick &amp; place pad</p> <p><b>AT</b> = tube packing; with film pad</p> <p><b>BT</b> = reel packing; with film pad</p>

# 1.27mm pitch Female Header

- SMT - dual row 4.50mm profile



## APPLICATION AND FEATURES

- Standard: tube packing without locating pegs and polarization bump
- Also available with "pick & place pad" for automatic suck assembly to the PCB

- Medium profile, 4.50mm height Type. Hi-rel dual beam contacts.
- Mating with 1.27mm x 1.27mm pitch, 0.40mm square or round pin headers.

## SPECIFICATIONS

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Processing temperature	+250°C +0/-5°C for 10sec.
Contact resistance	20 mΩ max.	Contact material	(RoHS compliant) Phosphor Bronze
Withstanding voltage	500 V AC	Insulator material	(RoHS compliant) LCP UL 94 V-0

## How to order

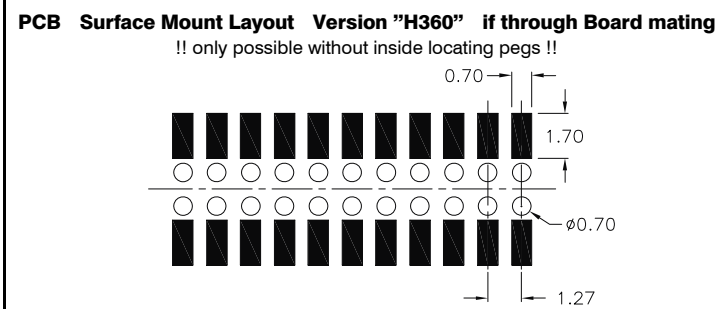
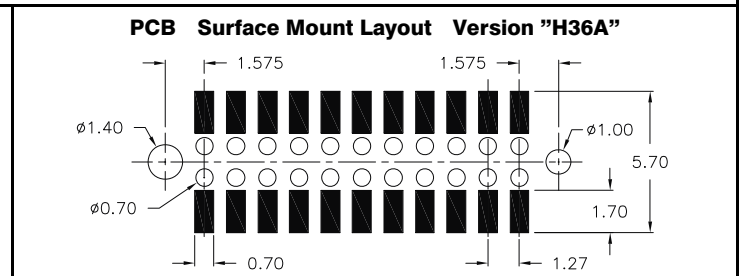
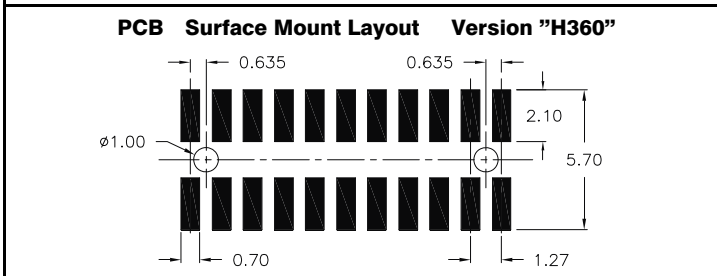
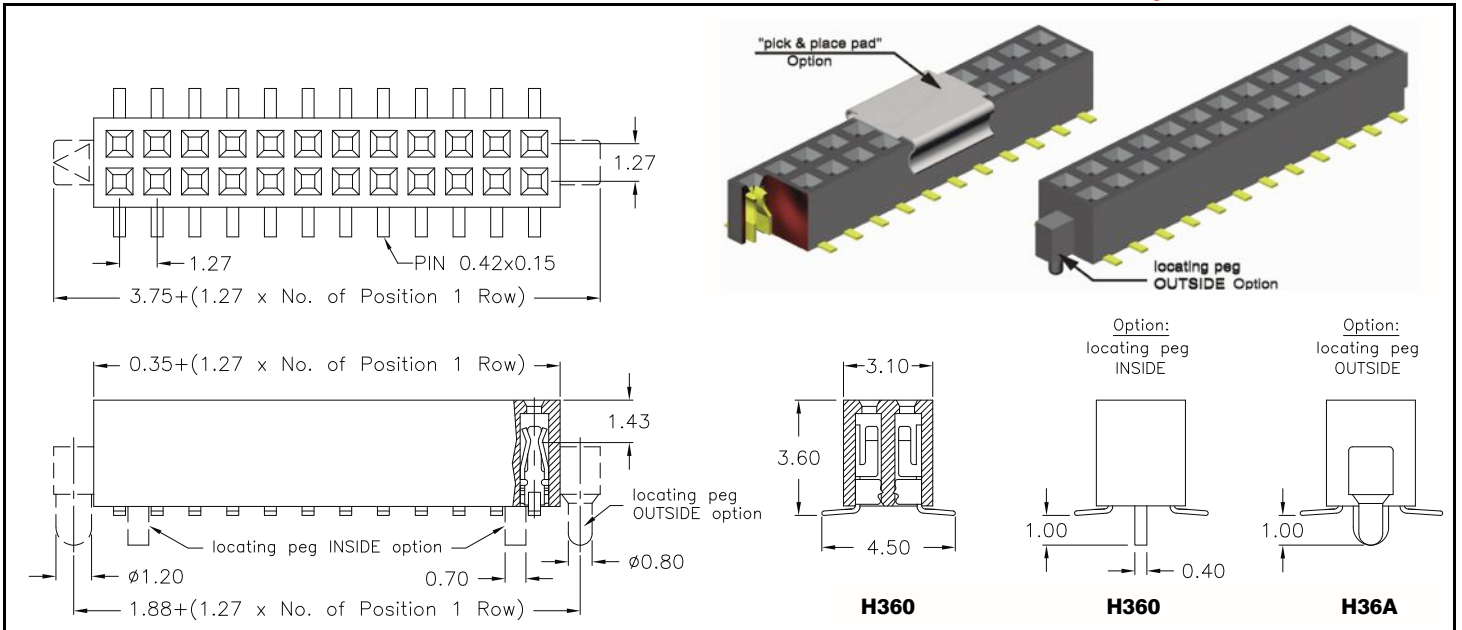
BS2 - xxx - H xxx - 55 / 11 X

Nbr of contacts	Version	Packing and "pick & place pad" Option
008 to 100	<b>450</b> = without & with inside locating pegs <b>45A</b> = with outside locating pegs <b>45B</b> = with outside locating pegs & polarization bump <b>45P</b> = with polarization bump; without locating pegs	See below
004 to 100		
only BS2-xxx-H450-55/11 BS2-xxx-H450-55/11A BS2-xxx-H450-55/11B		

## Order Code Options:

without "locating pegs"	with "locating pegs"
BS2-xxx-H450-55/11 = tube packing; w/o pick & place pad	BS2-xxx-H450-55/11C = tube packing; w/o pick & place pad
BS2-xxx-H45P-55/11 = tube packing; w/o pick & place pad	BS2-xxx-H450-55/11D = tube packing; with pick & place pad
BS2-xxx-H450-55/11A = tube packing; with pick & place pad	BS2-xxx-H45A-55/11D = tube packing; with pick & place pad
BS2-xxx-H45P-55/11A = tube packing; with pick & place pad	BS2-xxx-H45B-55/11D = tube packing; with pick & place pad
BS2-xxx-H450-55/11B = reel packing; with pick & place pad	BS2-xxx-H450-55/11E = reel packing; with pick & place pad
BS2-xxx-H45P-55/11B = reel packing; with pick & place pad	BS2-xxx-H45A-55/11E = reel packing; with pick & place pad
	BS2-xxx-H45B-55/11E = reel packing ;with pick & place pad

1.27mm pitch Female Header  
 - SMT - dual row 3.60mm profile



**APPLICATION AND FEATURES**

- **Standard: tube packing without locating pegs**
- Also available with "pick & place pad" for automatic suck assembly to the PCB
- Low profile, 3.60mm height Type. Hi-rel dual beam contacts.
- Mating with 1.27mm x 1.27mm pitch, 0.40mm square pin headers.
- Through Board mating possible

**SPECIFICATIONS**

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Processing temperature	+250°C +0/-5°C for 10sec.
Contact resistance	20 mΩ max.	Contact material	(RoHS compliant) Phosphor Bronze
Withstanding voltage	500 V AC	Insulator material	(RoHS compliant) LCP UL 94 V-0

How to order

BS2 - xxx - H xxx - 55 / 11 X

<b>Nbr of contacts</b>	<b>Version</b>	<b>Packing and "pick and place pad" Option</b>
006 to 100	<b>360</b> = without & with inside locating pegs <b>36A</b> = with outside locating pegs	See below

**Order Code Options:**

<b>without "locating pegs"</b>	<b>with "locating pegs"</b>
BS2-xxx-H360-55/11 = tube packing; w/o pick & place pad	BS2-xxx-H360-55/11C = tube packing; w/o pick & place pad
BS2-xxx-H360-55/11A = tube packing; with pick & place pad	BS2-xxx-H360-55/11D = tube packing; with pick & place pad
BS2-xxx-H360-55/11B = reel packing; with pick & place pad	BS2-xxx-H36A-55/11D = tube packing; with pick & place pad
	BS2-xxx-H360-55/11E = reel packing; with pick & place pad
	BS2-xxx-H36A-55/11E = reel packing; with pick & place pad

# 1.27mm pitch Female Header - SMT- single row 2.10 & 2.20mm profile



<p><b>Top entry</b></p> <p><b>Foot style T220</b></p> <p><b>T221</b></p> <p>Side view dimensions: <math>0.35 + (1.27 \times \text{No. of Position})</math>, 0.61, 1.80, 2.20, 5°~10°, 3.60</p> <p>PIN 0.42x0.15</p>	<p><b>Bottom entry</b></p> <p><b>Foot style B210</b></p> <p><b>B211</b></p> <p>Side view dimensions: <math>0.40 + (1.27 \times \text{No. of Position})</math>, 2.00, 2.10, 1.80, 3.10</p> <p>PIN 0.40x0.15</p>																
<p><b>PCB Surface Mount &amp; Hole Layout</b></p> <p>Foot style: T220      T221</p>	<p><b>PCB Surface Mount &amp; Hole Layout</b></p> <p>Foot style: B210      B211</p>																
<p><b>APPLICATION AND FEATURES</b></p> <p><b>Standard: tube packing, without "pick &amp; place pad"</b></p> <ul style="list-style-type: none"> <li>■ Also available "reel" packing.</li> <li>■ Low profile, 2.10 &amp; 2.20mm height. Hi-rel dual beam contacts.</li> <li>■ Mating with 1.27mm pitch 0.40mm square or round pin headers.</li> <li>■ Designed for board to board small spacing interconnection.</li> </ul>	<p><b>SPECIFICATIONS</b></p> <table style="width:100%; border: none;"> <tr> <td>Current rating</td> <td>1 A</td> </tr> <tr> <td>Insulator resistance</td> <td>1000 MΩ min</td> </tr> <tr> <td>Contact resistance</td> <td>20 mΩ max.</td> </tr> <tr> <td>Withstanding voltage</td> <td>500 V AC</td> </tr> <tr> <td>Operating temperature</td> <td>-40°C to +105°C</td> </tr> <tr> <td>Processing temperature</td> <td>+250°C +0/-5°C for 10sec.</td> </tr> <tr> <td>Contact material</td> <td>(RoHS compliant) Phosphor Bronze</td> </tr> <tr> <td>Insulator material</td> <td>(RoHS compliant) Nylon UL 94 V-0</td> </tr> </table>	Current rating	1 A	Insulator resistance	1000 MΩ min	Contact resistance	20 mΩ max.	Withstanding voltage	500 V AC	Operating temperature	-40°C to +105°C	Processing temperature	+250°C +0/-5°C for 10sec.	Contact material	(RoHS compliant) Phosphor Bronze	Insulator material	(RoHS compliant) Nylon UL 94 V-0
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Processing temperature	+250°C +0/-5°C for 10sec.																
Contact material	(RoHS compliant) Phosphor Bronze																
Insulator material	(RoHS compliant) Nylon UL 94 V-0																

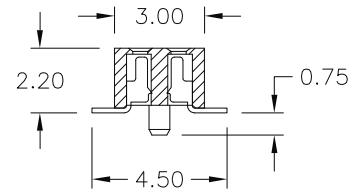
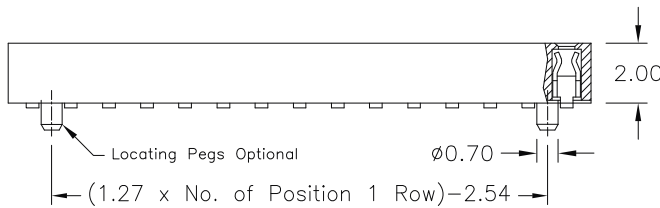
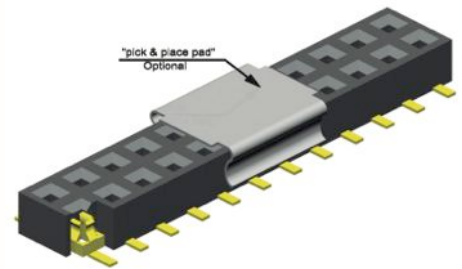
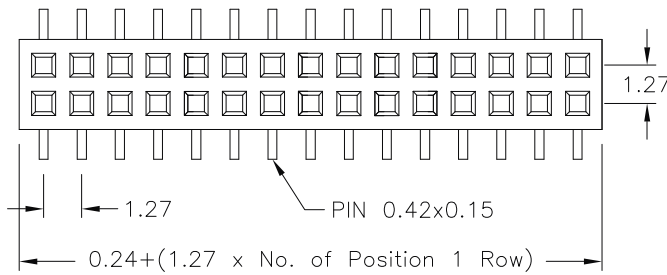
## How to order

BS1 - xxx - X 2xx - 55 / 11 XX

<b>Nbr of contacts</b>	<b>Version</b>	<b>Plating</b>	<b>Packing and "pick &amp; place pad" Option</b>
Top Entry (T22x) <b>003 to 040</b>	Top Entry <b>T 220 ; T 221</b> Bottom Entry <b>B 210 ; B 211</b>	<b>55</b> = gold	<b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad <b>AT</b> = tube packing; with film pad <b>BT</b> = reel packing; with film pad
Bottom Entry(B21x) <b>003 to 050</b>	Pls. choose <b>T220</b> or <b>B210</b> style if odd pin count. Foot style see above detail		

When using this female connector as a bottom entry connector, we recommend that the pinheader pins protrude by around 2.00mm above the surface of the female connector after assembly. This will avoid any risk of separation of the pinheader from the female header during shock and vibration.

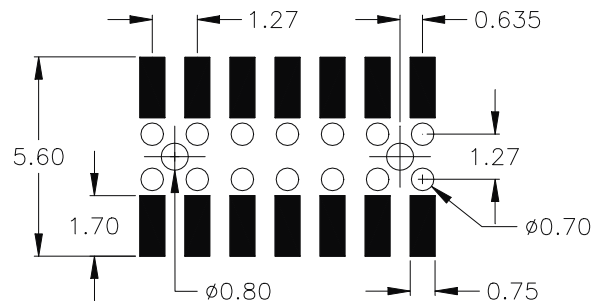
1.27mm pitch Female Header - SMT-  
Top & Bottom Entry 2.20mm profile



**APPLICATION AND FEATURES**

- **Standard: tube packing, without locating pegs and without "pick & place pad"**
- Also available "reel" packing.
- Low profile, 2.20mm height. Hi-rel dual beam contacts.
- Mating with 1.27mm x 1.27mm pitch 0.40mm square or round pin headers.
- Designed for board to board small spacing interconnection.

**PCB Surface Mount & Hole Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) Nylon UL 94 V-0

**How to order**

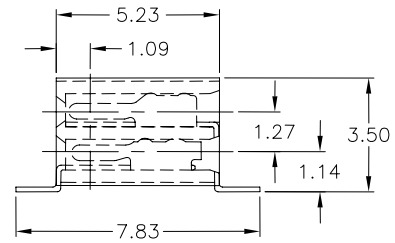
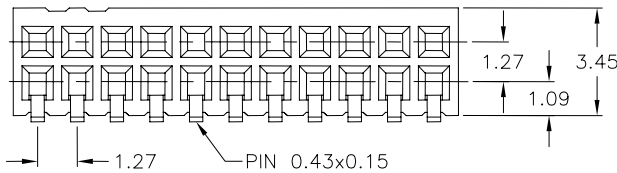
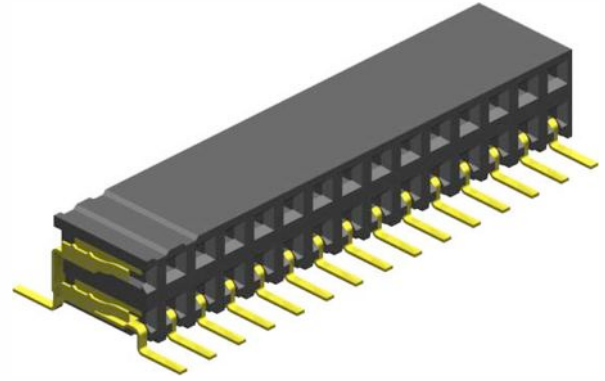
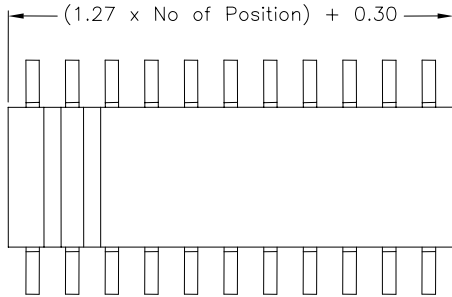
BS2 - xxx - TB 22 - 55 / 11 X

<p><b>Nbr of contacts</b></p> <p><b>006 to 080</b></p>	<p><b>Plating</b></p> <p><b>55 = gold</b></p>	<p><b>Packing and "pick &amp; place pad" Option</b></p> <p><b>without "locating pegs"</b></p> <p><b>A</b> = tube packing; with pick &amp; place pad</p> <p><b>B</b> = reel packing; with pick &amp; place pad</p> <hr/> <p><b>with "locating pegs"</b></p> <p><b>C</b> = tube packing; without pick &amp; place pad</p> <p><b>D</b> = tube packing; with pick &amp; place pad</p> <p><b>E</b> = reel packing; with pick &amp; place pad</p>
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When using this female connector as a bottom entry connector, we recommend that the pinheader pins protrude by around 2.00mm above the surface of the female connector after assembly. This will avoid any risk of separation of the pinheader from the female header during shock and vibration.

1.27mm pitch Female Header

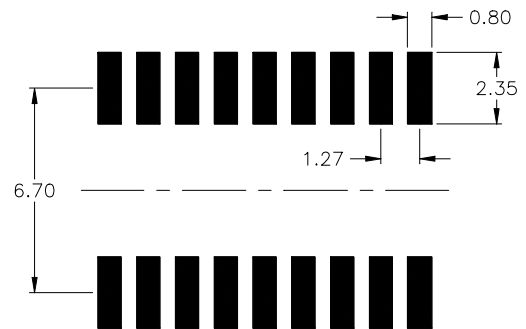
- SMT- side entry



**APPLICATION AND FEATURES**

- **Standard: tube packing**
- Hi-rel dual beam contact assures reliable PC-Board connections
- Accepts 0.40mm square pins; Pin Header 1.27mm x1.27 mm
- 3.50mm height above board
- Automatic assembly to PCB possible

**PCB Surface Mount Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) Nylon 6T UL 94 V-0

**How to order**

**BS 2 - xxx - R 345 - 55 / 11 X**

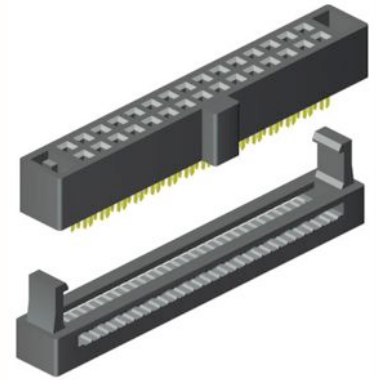
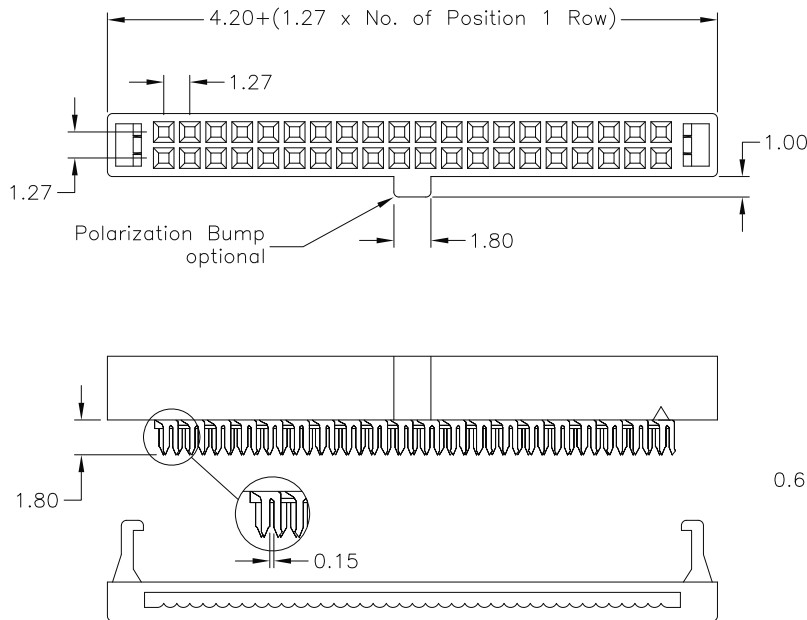
Nbr of contacts	
<b>006</b>	to <b>080</b>

Plating	
<b>55</b>	= gold
Other platings on request	

Packing Option	
<b>R</b>	= reel packing

1.27mm pitch

IDC – Female Connector



### SPECIFICATIONS

Current rating	0.5 A	Operating temperature	- 40°C to +105°C
Contact resistance	30 mΩ max.	Contact material	(RoHS compliant) Phosphor Bronze
Insulation resistance	1000 MΩ min.	Insulator material	(RoHS compliant) P.B.T. black UL 94 V-0
Withstanding voltage	250 V AC		

### APPLICATION AND FEATURES

Designed to mate with 0.40mm square pins, box (shrouded) header type  
SLS – xxx – X 510 – 55/11  
High Quality dual beam contacts.  
Accepts 30 AWG 0.635mm pitch flat ribbon cable.

### How to order

IDS - xxx - W 050 - 55 / P

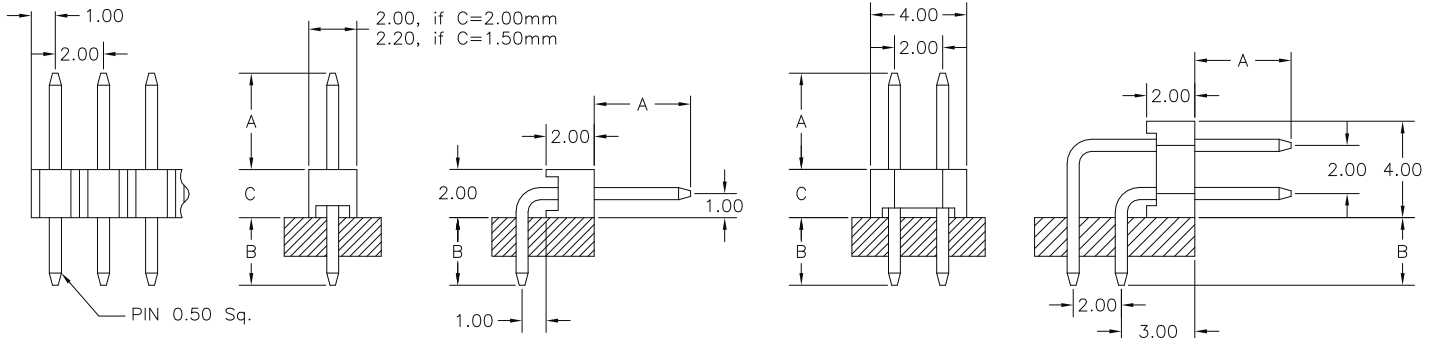
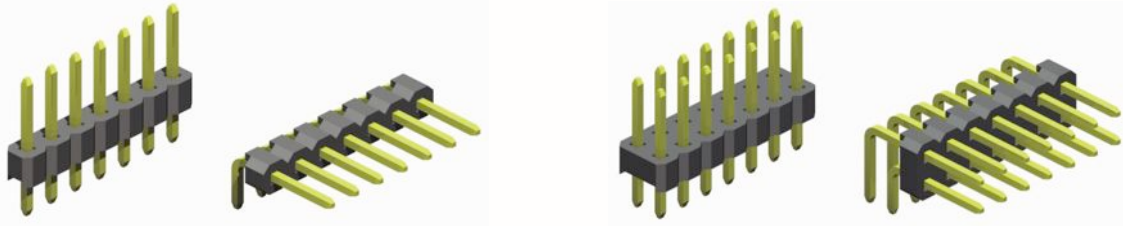
Nbr of contacts
006; 008; 010; 012
014; 016; 020; 022
024; 026; 030; 034
036; 040; 044; 050
060; 064; 068; 080

Plating
55 = gold

Option
P
if Polarization bump is requested.



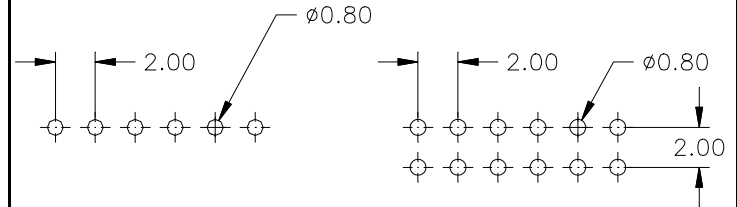
2.00mm pitch Pin Header  
 - THT - straight & right angle



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) P.B.T. or Nylon UL 94 V-0
	<b>Standard</b> : P.B.T.

**PCB Hole Layout**



**APPLICATION AND FEATURES**

Side and end stackable.  
 Variable terminal lengths as well as two insulator thicknesses available for the straight type.  
 Notches for easy breaking.  
 Straight type with standoff's for post solder cleaning.

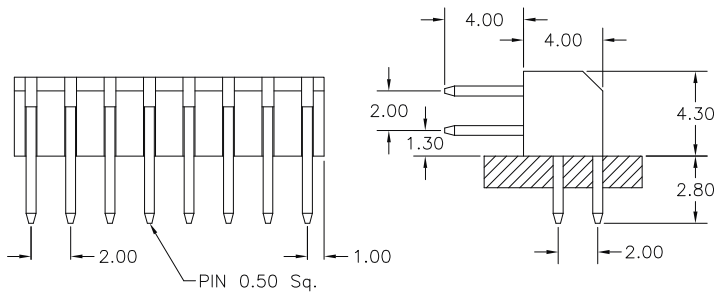
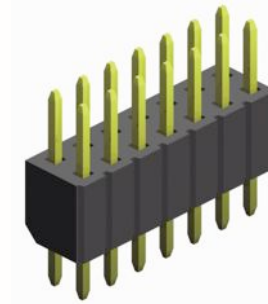
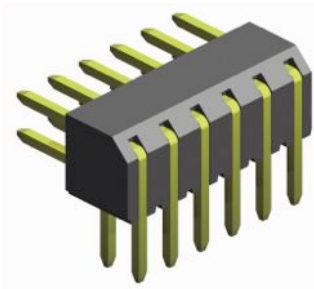
**How to order**

**SL** x - xxx - X xxx/xx - **55** /2

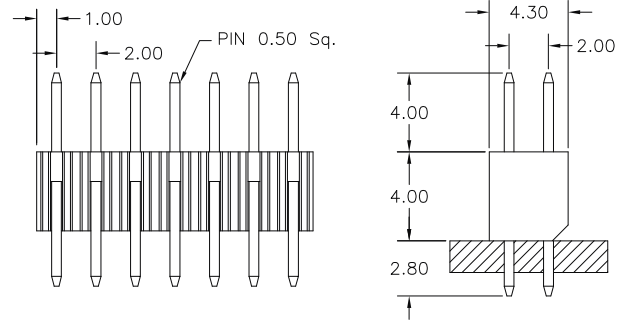
Rows	Nbr of pins	Insulator style	DIM "C"	Code	Pin code	DIM "A"	DIM "B"	Plating
1 = single row	002 to 040	straight	2.00 mm	S = P.B.T. N = Nylon	088/01 088/02 088/03 088/04 088/05	4.00 mm 6.00 mm 6.80 mm 4.00 mm 3.70 mm	2.80 mm 2.80 mm 3.00 mm 4.00 mm 5.00 mm	55 = gold (standard) 99 = tin (leadfree tin) Other platings on request
			1.50 mm	B = Nylon	096/00 096/01 096/02 096/03 096/04 096/05 096/06 096/07 096/08 096/09 096/10	4.00 mm 6.00 mm 4.50 mm 1.70 mm 4.00 mm 3.20 mm 4.00 mm 7.00 mm 3.60 mm 21.00 mm 5.10 mm	2.80 mm 2.10 mm 4.00 mm 8.80 mm 2.30 mm 3.50 mm 4.00 mm 2.20 mm 3.00 mm 2.54 mm 3.00 mm	
2 = dual row	004 to 080	right angle	2.00 mm	R = P.B.T. K = Nylon	106/00 106/01 106/02 106/03 106/04 106/05 106/06 106/07	3.20 mm 4.00 mm 10.00 mm 11.00 mm 2.50 mm 5.00 mm 11.00 mm 6.00 mm	3.20 mm 2.80 mm 2.80 mm 2.80 mm 2.80 mm 2.80 mm 2.40 mm 2.80 mm	

Other dimensions on request

2.00mm pitch Pin Header  
 - THT - high plastic base



R430

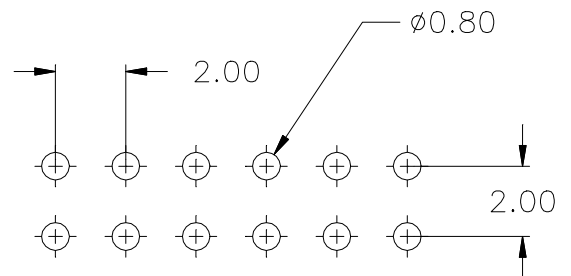


S400

**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material <i>(RoHS compliant)</i>	Copper alloy
Insulator material <i>(RoHS compliant)</i>	Nylon UL 94 V-0

**PCB Hole Layout**



**APPLICATION AND FEATURES**

- Side stackable
- Mate with 2.00 mm pitch female and shunt connector
- Standoff's facilitate post solder cleaning

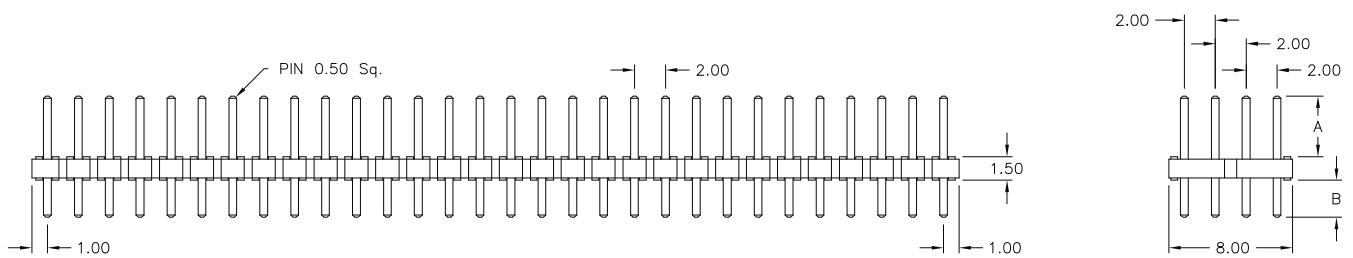
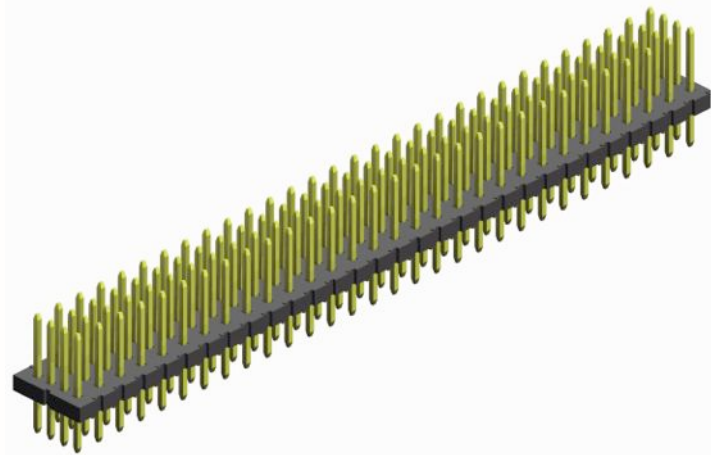
How to order

SE 2 - xxx - X xxx - xx / 2

Nbr of pins
004 to 080

Pin style
<b>S400</b> = straight
<b>R430</b> = right angle

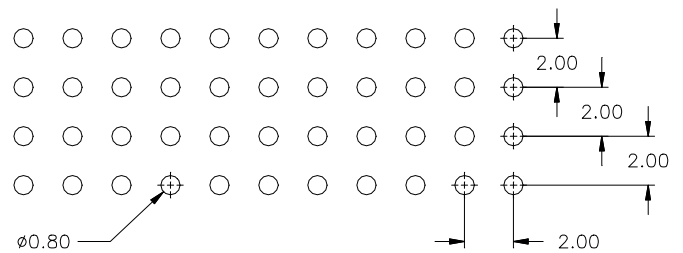
Plating
<b>55</b> = gold
<b>95</b> = tin/gold <i>(tin leadfree)</i>
Other platings on request



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

**PCB Hole Layout**



**APPLICATION AND FEATURES**

Designed for “board to board” small spacing interconnection.

Variable terminal length available.

With standoff's for post solder cleaning.

Mate with female header BL4 - xxx - S630/ x - xx/2

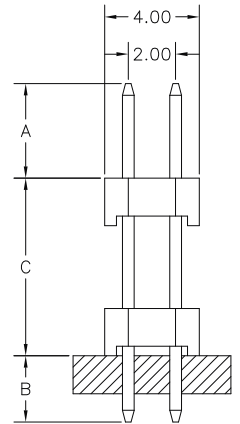
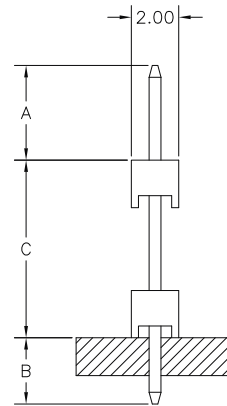
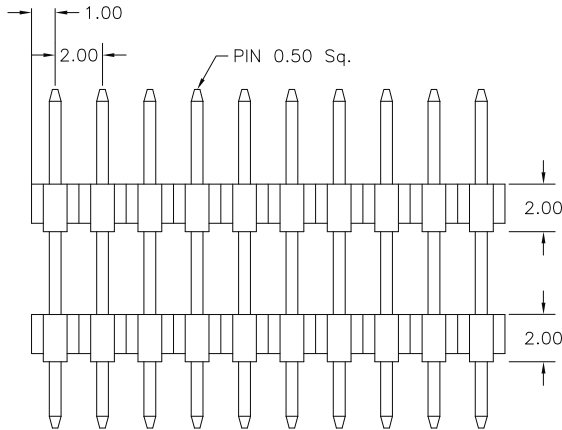
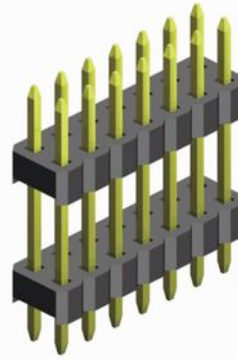
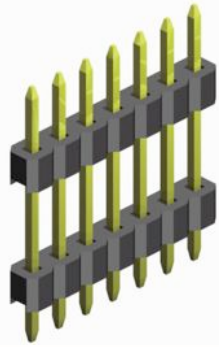
**How to order**

**SL4 - xxx - S xxx/x - 55 /2**

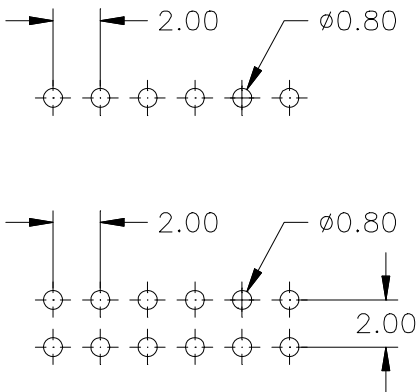
Nbr of pins
<b>012</b> to <b>120</b>

Pin code	DIM “A”	DIM “B”
<b>830/0</b>	4.40 mm	2.40 mm
<b>830/1</b>	8.60 mm	3.60 mm
<b>830/2</b>	3.20 mm	3.50 mm
<b>830/3</b>	12.00 mm	2.40 mm
<b>830/4</b>	7.40 mm	2.70 mm
Other dimensions on request		

Plating
<b>55</b> = gold
Other platings on request



**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	Copper alloy <i>(RoHS compliant)</i>
Insulator material	P.B.T. or Nylon, UL 94 V-0 <i>(RoHS compliant)</i> <b>Standard : P.B.T.</b>

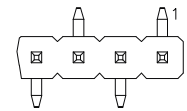
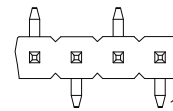
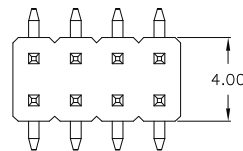
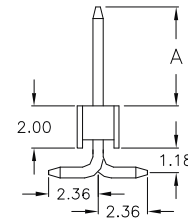
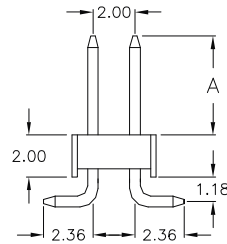
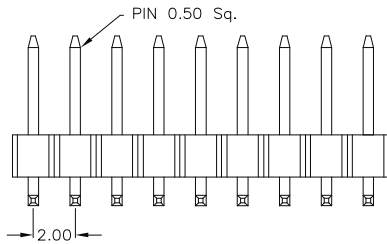
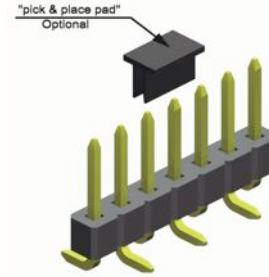
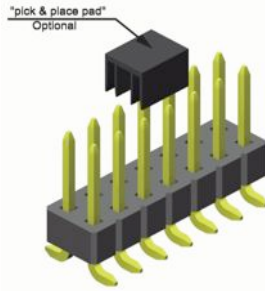
Pin code	DIM "A"	DIM "B"	DIM "C"
<b>143/02</b>	6.80 mm	2.80 mm	4.70 mm
<b>104/01</b>	2.70 mm	2.70 mm	5.00 mm
<b>136/02</b>	5.30 mm	3.20 mm	5.10 mm
<b>191/01</b>	9.30 mm	4.30 mm	5.50 mm
<b>117/01</b>	2.80 mm	2.80 mm	6.10 mm
<b>143/01</b>	4.00 mm	2.80 mm	7.50 mm
<b>143/03</b>	2.40 mm	3.90 mm	8.00 mm
<b>150/01</b>	4.00 mm	2.50 mm	8.50 mm
<b>163/01</b>	4.00 mm	2.80 mm	9.50 mm
<b>180/03</b>	5.00 mm	3.00 mm	10.00 mm
<b>170/01</b>	3.00 mm	3.00 mm	11.00 mm
<b>180/02</b>	3.00 mm	3.00 mm	12.00 mm
<b>210/01</b>	6.00 mm	3.00 mm	12.00 mm
<b>260/04</b>	9.00 mm	4.00 mm	13.00 mm
<b>220/01</b>	4.00 mm	2.80 mm	15.25 mm
<b>252/02</b>	5.20 mm	4.20 mm	15.80 mm
<b>300/03</b>	10.00 mm	3.00 mm	17.00 mm
<b>225/01</b>	2.50 mm	2.50 mm	17.50 mm
<b>270/02</b>	4.00 mm	3.00 mm	20.00 mm
<b>410/01</b>	9.00 mm	4.00 mm	28.00 mm
<b>432/01</b>	3.20 mm	3.20 mm	36.80 mm

Other dimensions on request

**How to order**

**SP x - xxx - X xxx/xx - 55 /2**

<b>Rows</b>	<b>Nbr of pins</b>	<b>Insulator</b>	<b>Pin code</b>	<b>Plating</b>
<b>1</b> = single row	<b>002</b> to <b>040</b>	<b>S</b> = P.B.T. <b>N</b> = Nylon <small>Nylon processing temp.: +250°C +0/-5°C for 5sec.</small>	dimension and others see above table	<b>55</b> = gold Other platings on request
<b>2</b> = dual row	<b>004</b> to <b>080</b>			

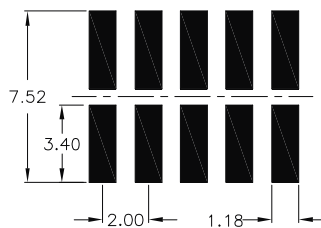


Foot style: **085** **085** **185**

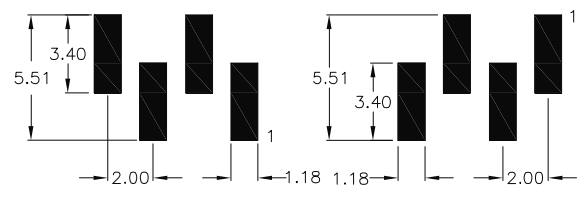
**APPLICATION AND FEATURES**

- **Standard: tube packing and without "pick & place pad"**
- Low Profile Insulator
- Assures reliable PC Board connections
- Mate with female header 2.00mm x 2.00mm pitch

**PCB Surface Mount Layout**



Foot style: **085** (dual row)



**085** (single row)

**185** (single row)

**SPECIFICATIONS**

Current rating	1 A	Operating temperature)	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Processing temperature	+250°C +0/-5°C for 5sec.
Withstanding voltage	500 V AC	Contact material (RoHS compliant)	Brass
		Insulator material (RoHS compliant)	Nylon UL 94 V-0

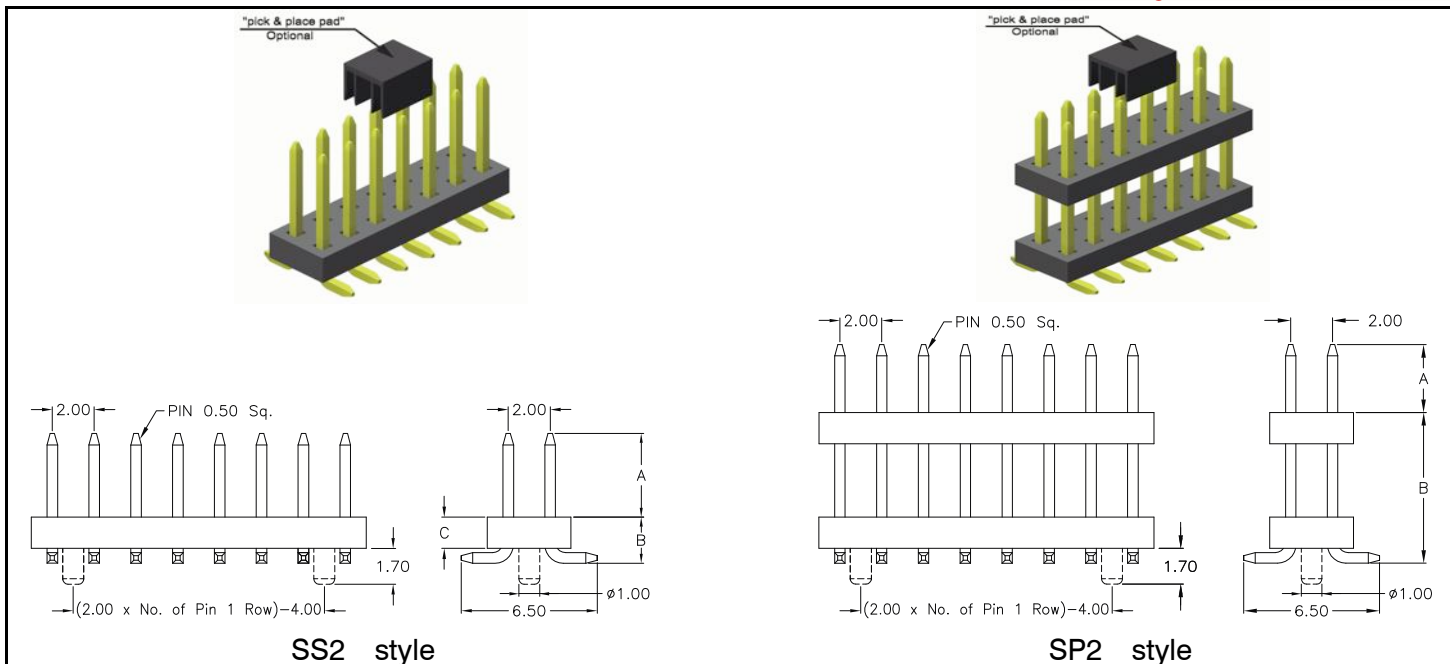
**How to order**

**SS** x - xxx - H xxx / x - **55** /2 X

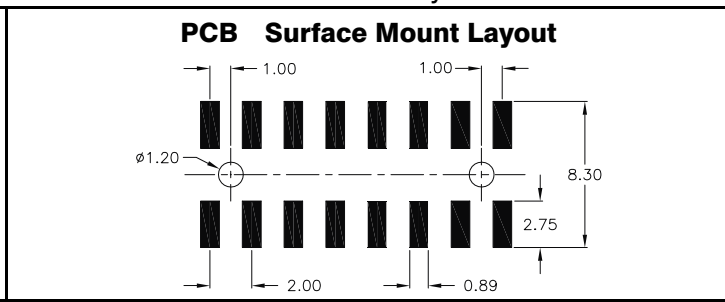
Rows	Nbr of pins	Foot style	Pin code	DIM "A"	Plating	Packing and "pick & place pad" Option
1 single row	002 to 040	085 185	0	4.73 mm	55 = gold	A = tube packing; with pick & place pad B = reel packing; with pick & place pad
		Pls. choose 085 style if odd pin count.		1		
2 dual row	004 to 080	085	2	13.57 mm	Other platings on request	
			3	6.50 mm		
			4	8.07 mm		
			5	7.62 mm		
			6	9.10 mm		
			7	10.00 mm		
			Other dimensions on request			

2.00mm pitch

- SMT - Pin Header & Board Spacer



- APPLICATION AND FEATURES**
- **Standard: tube packing, without "locating pegs" and "pick & place pad"**
  - Designed for "board to board" spacing
  - Variable terminal length available
  - Mate with female header 2.00mm x 2.00mm pitch



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C

**SPECIFICATIONS**

Processing temperature	+250°C +0/-5°C
	SS2 Style = 250°C for 10sec.
	SP2 Style = 250°C for 5sec.
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

How to order

S X 2 - xxx - H xxx/x - 55 /2 X

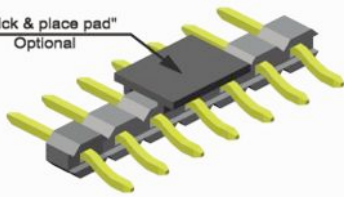
Pin style	Nbr of pins	Pin code	DIM "A"	DIM "B"	DIM "C"	Plating	Packing and "pick & place pad" Option
<b>S</b> Low Profile	<b>006</b> to <b>050</b>	<b>064/0</b>	6.00 mm	2.20 mm	1.50 mm	<b>55</b> = gold  Other platings on request	<b>without "locating pegs"</b> <b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad  <b>with "locating pegs"</b> (if DIM "C" = 1.50mm only) <b>C</b> = tube packing; without pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad
		<b>064/1</b>	4.00 mm	2.20 mm	1.50 mm		
		<b>064/2</b>	3.50 mm	2.70 mm	2.00 mm		
		<b>064/3</b>	5.80 mm	2.20 mm	1.50 mm		
		<b>064/4</b>	3.20 mm	2.20 mm	1.50 mm		
		<b>064/5</b>	3.60 mm	2.20 mm	1.50 mm		
		<b>064/6</b>	4.00 mm	2.70 mm	2.00 mm		
		<b>064/7</b>	13.50 mm	2.65 mm	2.00 mm		
		<b>064/8</b>	9.50 mm	2.20 mm	1.50 mm		
		<b>064/9</b>	8.00 mm	2.20 mm	1.50 mm		
<b>P</b> Board Spacer	<b>006</b> to <b>050</b>	<b>065/0</b>	6.00 mm	6.00 mm			
		<b>065/A</b>	5.40 mm	7.00 mm			
		<b>065/4</b>	3.90 mm	8.00 mm			
		<b>065/7</b>	7.50 mm	8.50 mm			
		<b>065/1</b>	6.00 mm	10.00 mm			
		<b>065/2</b>	6.00 mm	12.00 mm			
		<b>065/6</b>	9.50 mm	12.00 mm			
		<b>065/9</b>	5.00 mm	12.30 mm			
		<b>065/8</b>	4.65 mm	12.70 mm			
		<b>065/3</b>	4.00 mm	13.33 mm			
		<b>065/B</b>	4.50 mm	16.00 mm			
		<b>065/5</b>	4.50 mm	17.00 mm			
Other dimensions on request							

2.00mm pitch Pin Header - slanted -

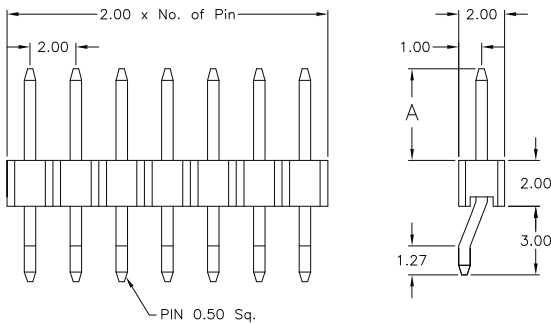
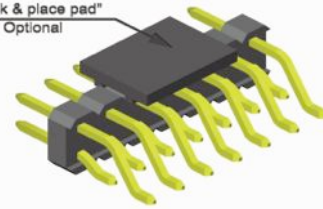
- SMT - single and dual row



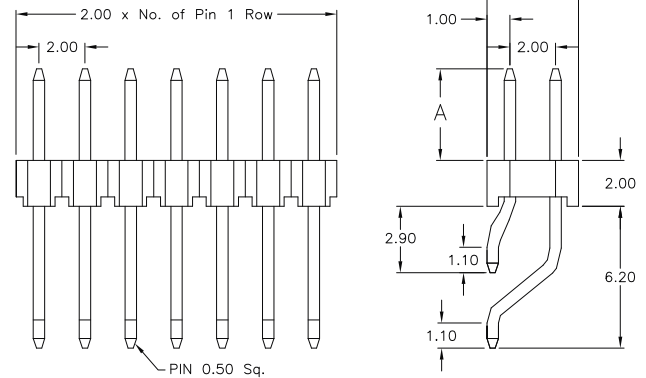
"pick & place pad"  
Optional



"pick & place pad"  
Optional

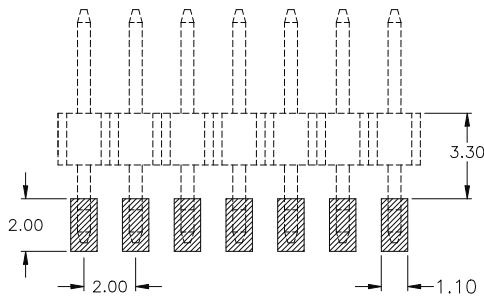


SR1 style

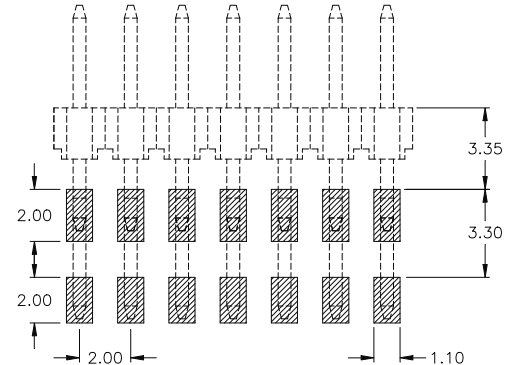


SR2 style

**PCB Surface Mount Layout single row**



**PCB Surface Mount Layout dual row**



**SPECIFICATIONS**

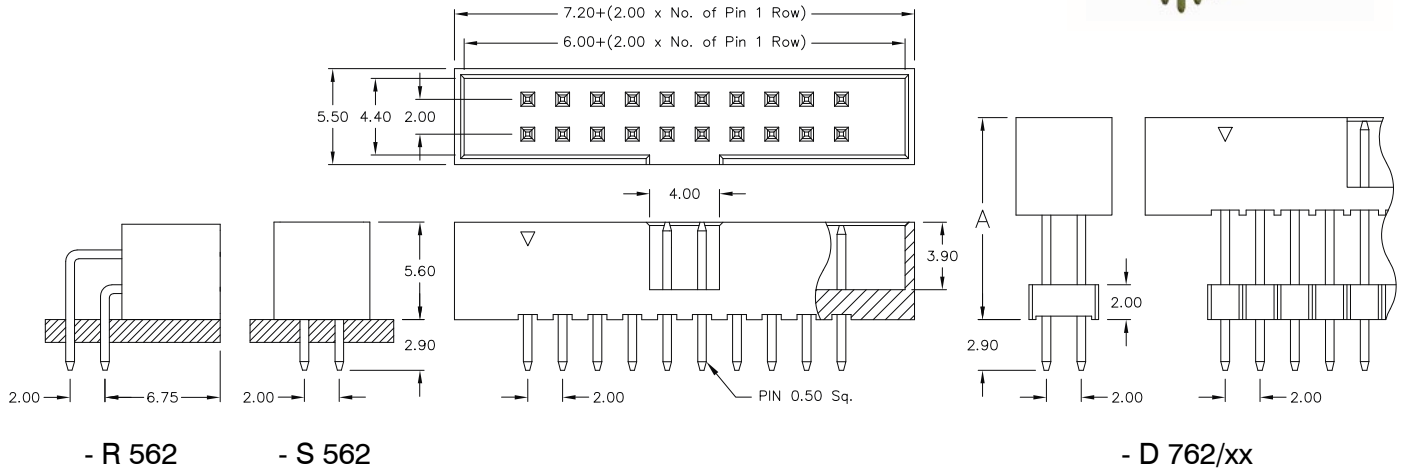
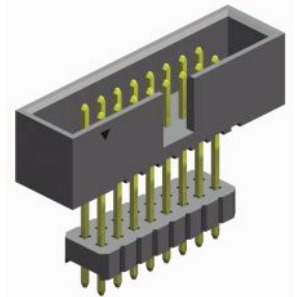
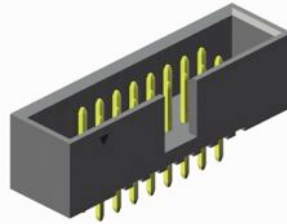
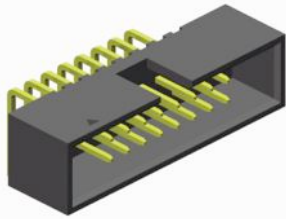
Current rating 1 A  
 Insulator resistance 1000 MΩ min.  
 Withstanding voltage 500 V AC

Operating temperature -40°C to +105°C  
 Processing temperature +250°C +0/-5°C for 10sec.  
 Contact material (RoHS compliant) Copper alloy  
 Insulator material (RoHS compliant) Nylon UL 94 V-0

**How to order**

SR x - xxx - H xxx/x - 55 / 2 X

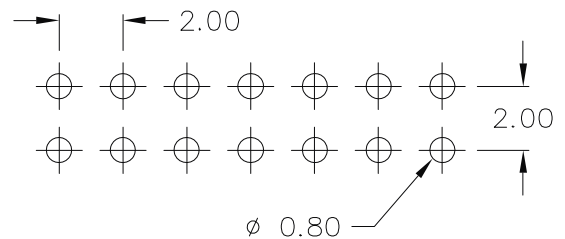
Rows	Nbr of pins	Pin code	DIM "A"	Plating	Packing and "pick & place pad" Option
1 = single row	002 to 040	093 / 0 093 / 1 093 / 2 093 / 3	4.00 mm 4.45 mm 3.20 mm 6.00 mm	55 = gold Other platings on request	A = tube packing; with pick & place pad B = reel packing; with pick & place pad
2 = dual row	004 to 080	122 / 0 122 / 1	4.00 mm 6.00 mm		



**APPLICATION AND FEATURES**

- Designed to mate with IDC female connector IDS-xxx-X 200-95/P
- Reliable flat cable to PCB connection
- No ejection latches for space saving

**PCB Hole Layout**

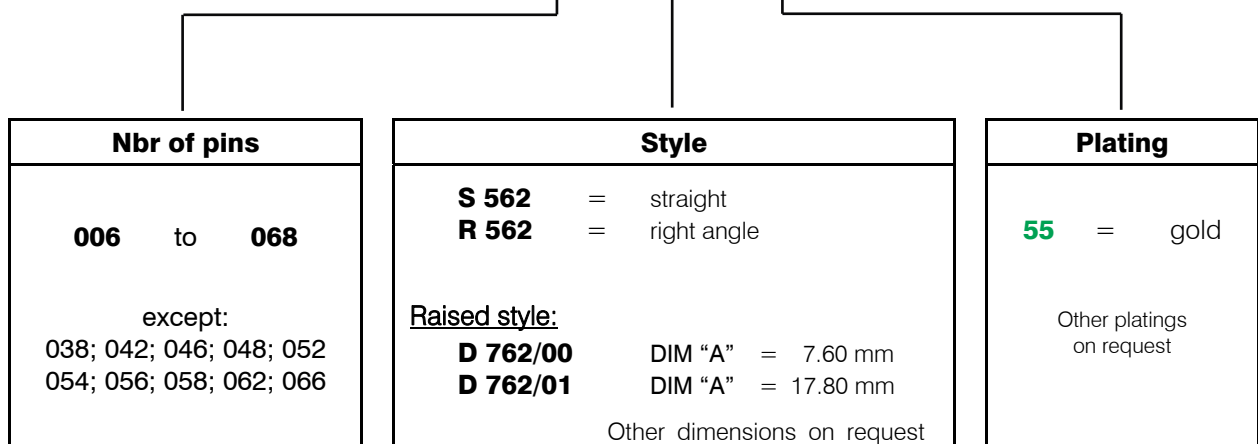


**SPECIFICATIONS**

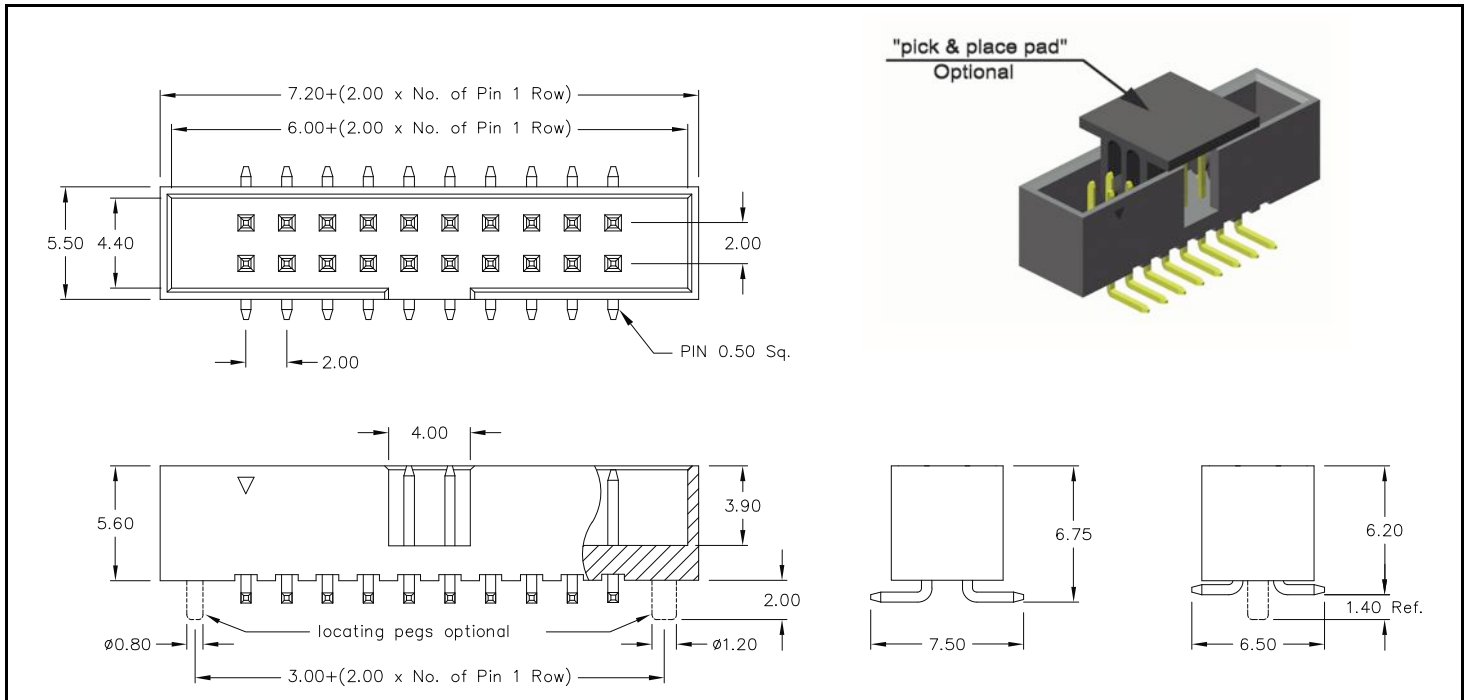
Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	(RoHS compliant) Copper alloy
Withstanding voltage	500 V AC	Insulator material	(RoHS compliant) Nylon UL 94 V-0

How to order

**SLS - xxx - X xxx - 55 /2**



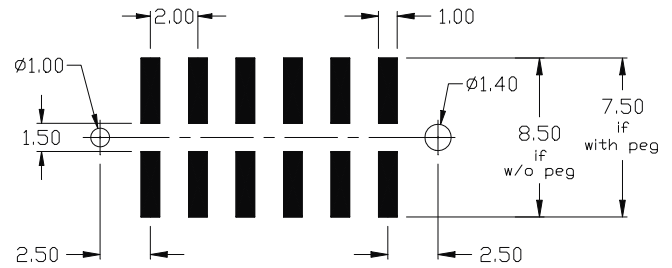




**APPLICATION AND FEATURES**

- **Standard:**  
**without locating pegs, tray packing and without "pick & place pad"**
- Also available "tape & reel" packing
- Designed to mate with IDC female connector IDS-xxx-X 200-95/P
- Reliable flat cable to PCB connection
- No ejection latches for space saving

**PCB Surface Mount Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 5sec.
Contact material	(RoHS compliant) Copper Alloy
Insulator material	(RoHS compliant) Nylon UL 94 V-0

How to order

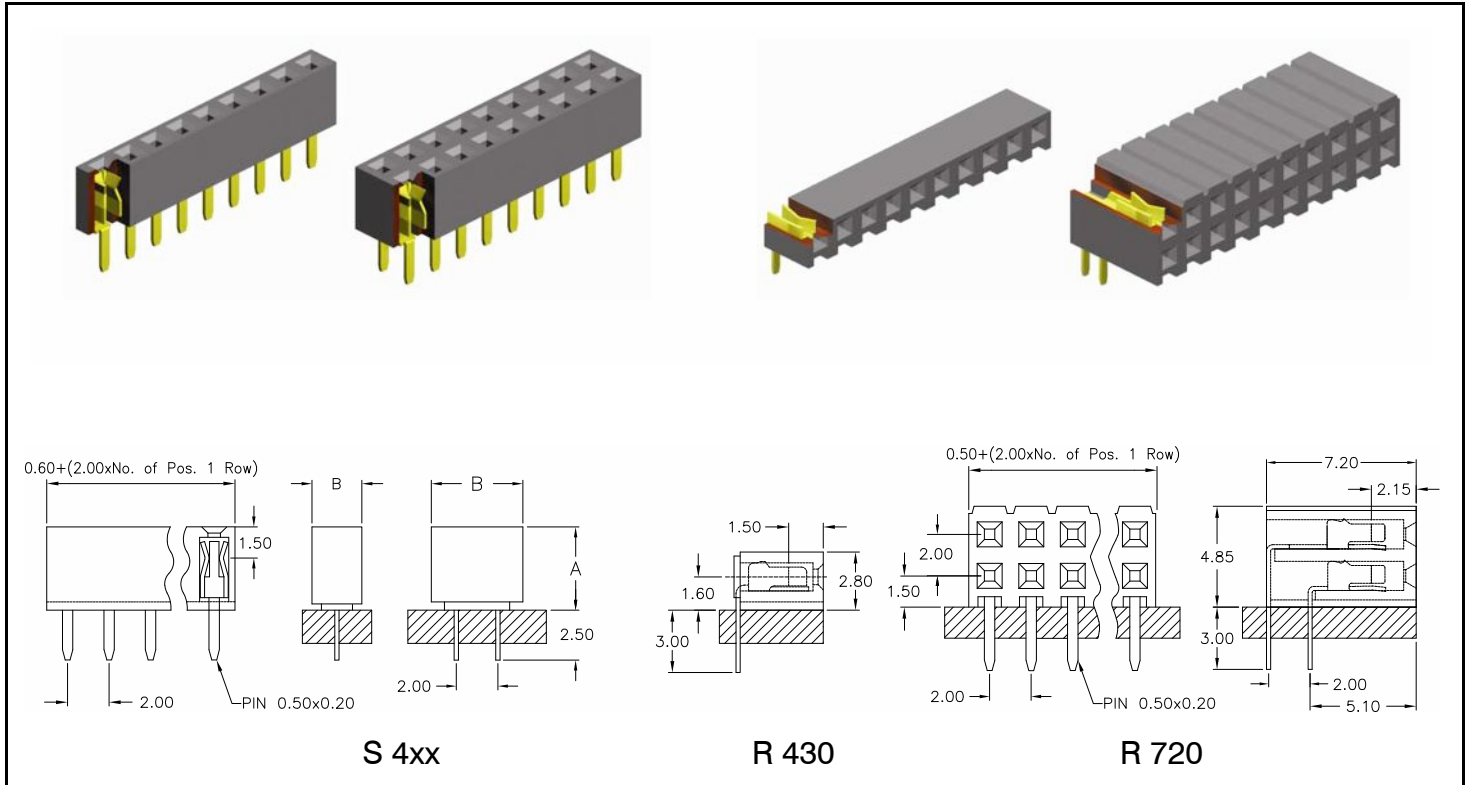
SLS - xxx - H 562 - 55 /2 X

Nbr of pins
without "locating pegs" <b>006 to 068</b>
except: 038; 042; 046; 048 052; 054; 056; 058 062; 066
with "locating pegs" <b>008 to 050</b>

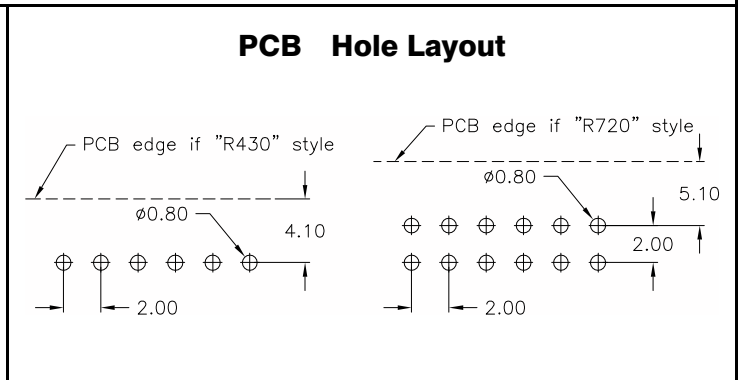
Plating
<b>55</b> = gold
Other platings on request

Packing and "pick & place pad" Option
<b>without "locating pegs"</b>
<b>F</b> = tray packing; with pick & place pad
<b>T</b> = tube packing; without pick & place pad
<b>A</b> = tube packing; with pick & place pad
<b>B</b> = reel packing; with pick & place pad
<b>with "locating pegs"</b>
<b>C</b> = tube packing; without pick & place pad
<b>D</b> = tube packing; with pick & place pad
<b>E</b> = reel packing; with pick & place pad

2.00mm pitch Female Header  
 - THT - low profile



SPECIFICATIONS	
Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	Phosphor Bronze (RoHS compliant)
Insulator material	Nylon UL 94 V-0 (RoHS compliant)



**APPLICATION AND FEATURES**

Low profile, 4.00mm and 4.30mm height single & dual row straight.  
 Designed for board to board small spacing interconnection.  
 High quality dual beam contacts mating with 0.50 x 0.50mm Pin Header.

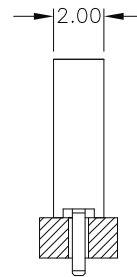
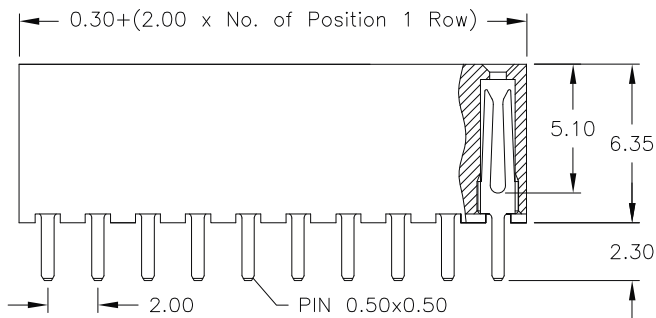
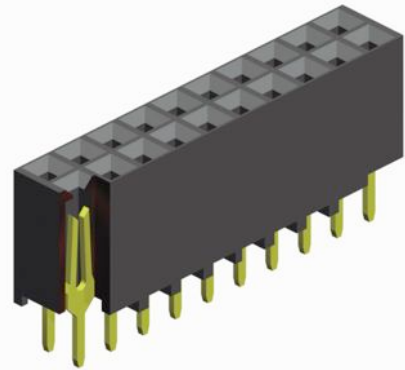
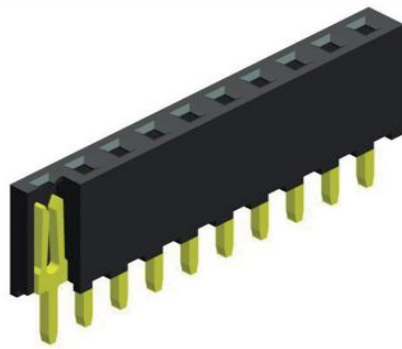
How to order

**BL x - xxx - X xxx - 55 /2**

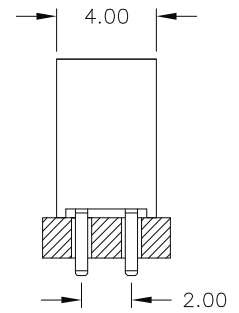
Rows	Nbr of contacts	Version	Plating
<b>1</b> = single row	S400 & S430 = <b>002</b> to <b>040</b> R430 = <b>003</b> to <b>025</b>	<b>S 400</b> = straight – single row : "A"=4.00 mm "B"=2.20 mm straight – dual row : "A"=4.00 mm "B"=4.20 mm <b>S 430</b> = straight – single row : "A"=4.30 mm "B"=2.40 mm straight – dual row : "A"=4.30 mm "B"=4.60 mm <b>R 430</b> = right angle – single row <b>R 720</b> = right angle – dual row	<b>55</b> = gold  Other platings on request
<b>2</b> = dual row	S400 & S430 = <b>004</b> to <b>080</b> R720 = <b>004</b> to <b>080</b>		

2.00mm pitch Female Header

- THT - 6.35mm profile



single row

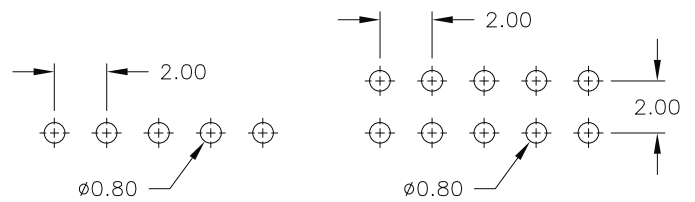


dual row

**APPLICATION AND FEATURES**

- For board-to-board connections
- Ideal solution for PC/104 Systems
- Accepts 0.50mm square pins
- Hi-rel fork contact design

**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper Alloy
Insulator material	(RoHS compliant) LCP UL 94 V-0

How to order

BL x - xxx - SH635 - 55 /2

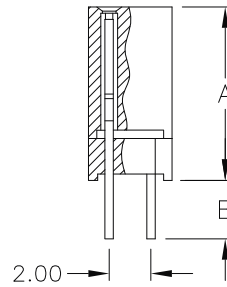
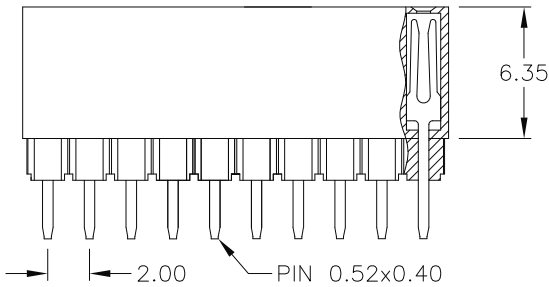
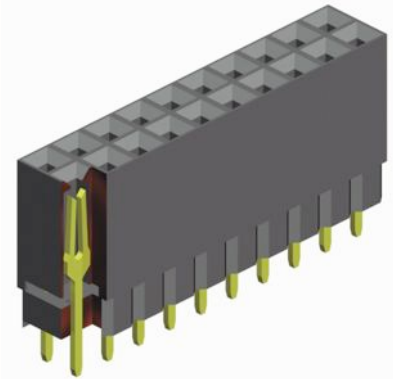
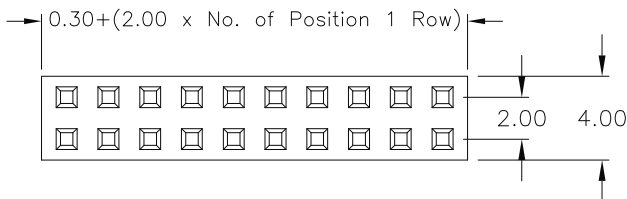
Rows
1 = single row
2 = dual row

Nbr of contacts
single row = 002 to 040
dual row = 004 to 080

Plating
55 = gold
Other platings on request

2.00mm pitch Female Header

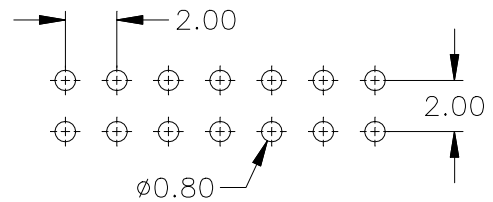
- THT - Elevated



**APPLICATION AND FEATURES**

- Various heights for board-to-board connections
- Also ideal solution for PC/104 Systems
- Accepts 0.50mm square pins
- Hi-rel fork contact design

**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) Nylon 6T UL 94 V-0

How to order

BE 2 - xxx - S xxx - 55/2

Nbr of contacts
004 to 080

Version	DIM "A" (mm / inch)	DIM "B" (mm / inch)
831	8.30 / .327	3.40 / .134
835	9.40 / .370	2.30 / .090
836	18.20 / .716	3.40 / .134
837	19.30 / .760	2.30 / .090
838	17.70 / .697	2.80 / .110
839	19.00 / .748	2.50 / .098
840	16.40 / .645	5.20 / .205
841	11.00 / .433	10.60 / .417
843	15.50 / .610	3.50 / .138

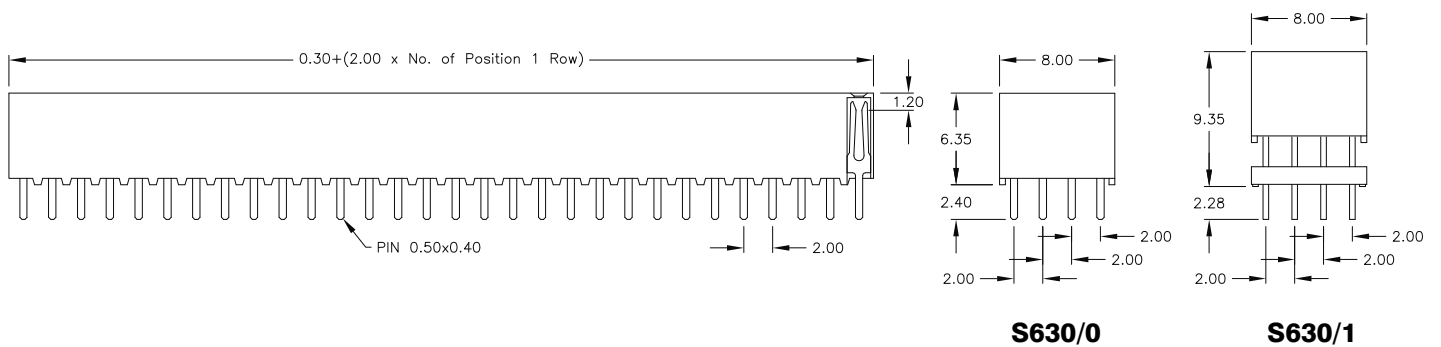
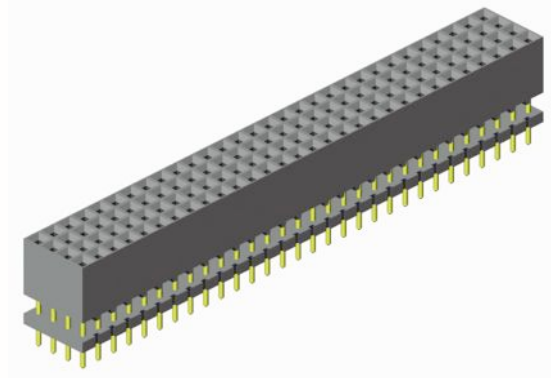
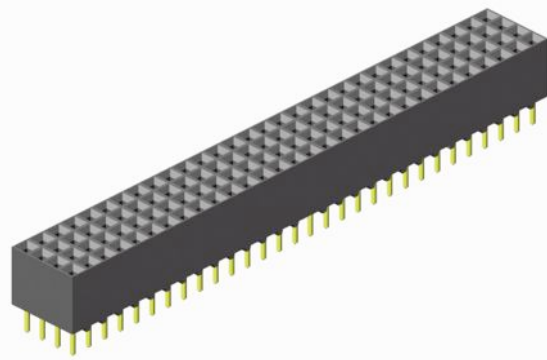
Plating
55 = gold
Other platings on request

Other dimensions on request.

Available as standard:

"A" + "B" = 11.70mm & 21.60mm

2.00mm pitch Female Header - THT -  
 "PC 104+ Type" Quad Row, 120 contacts max.



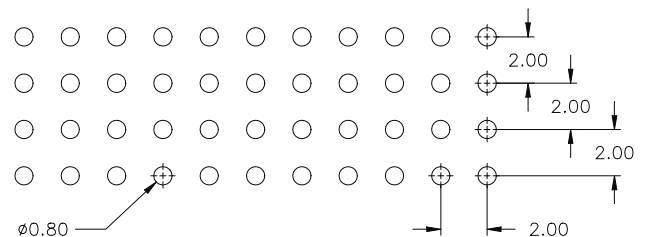
**S630/0**

**S630/1**

**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material (RoHS compliant)	Phosphor Bronze
Insulator material (RoHS compliant)	Nylon UL 94 V-0

**PCB Hole Layout**

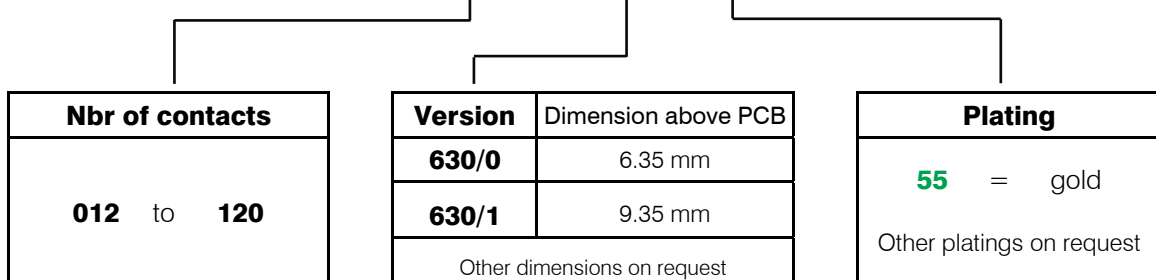


**APPLICATION AND FEATURES**

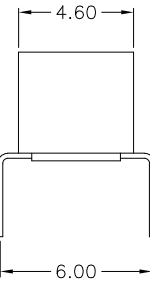
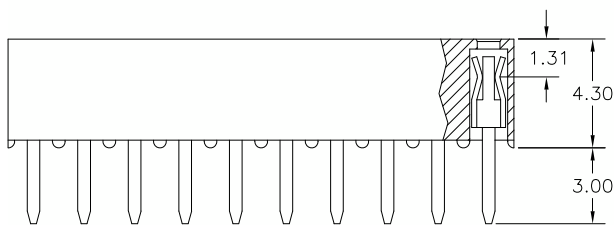
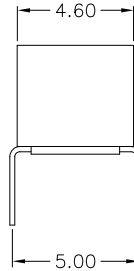
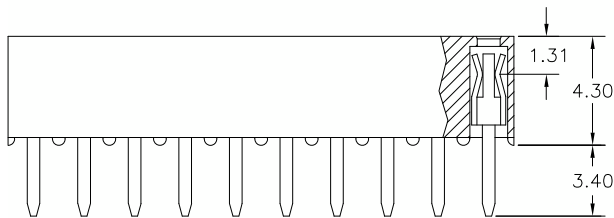
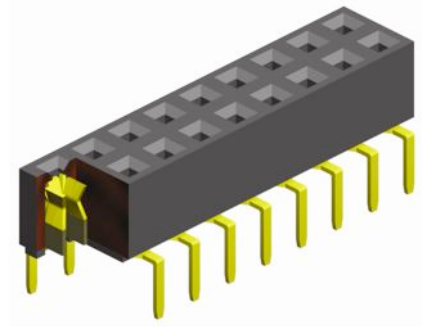
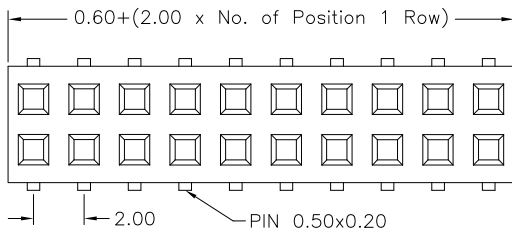
Low and high Profile PC/104-Plus Type  
 Designed for "board to board" small spacing interconnection  
 With standoff's for post solder cleaning  
 Mate with pin header SL4 - xxx - S830/x - xx/2

**How to order**

**BL4 - xxx - S xxx/x - 55 /2**



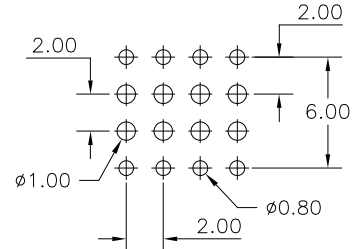
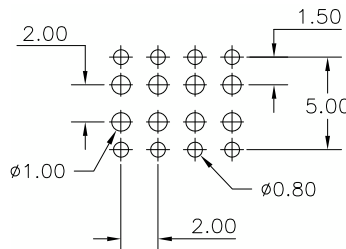
2.00mm pitch Female Header  
 - THT - Dual Entry Type



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) Nylon UL 94 V-0

**PCB Hole Layout**

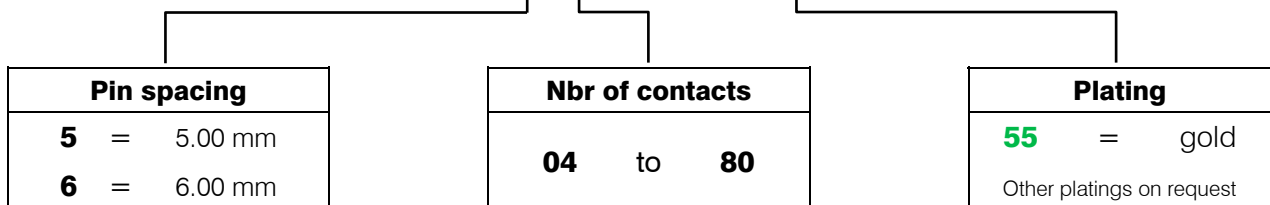


**APPLICATION AND FEATURES**

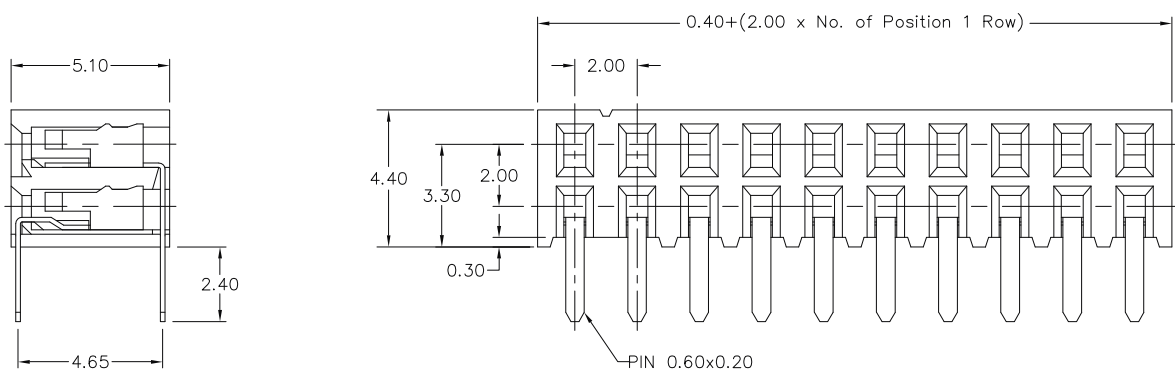
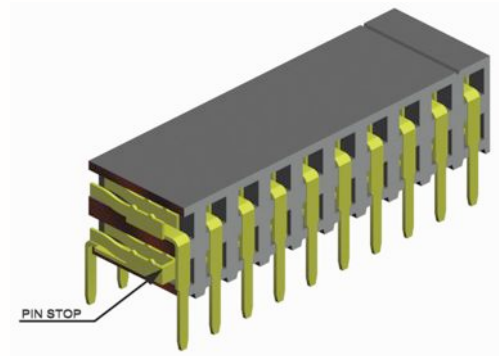
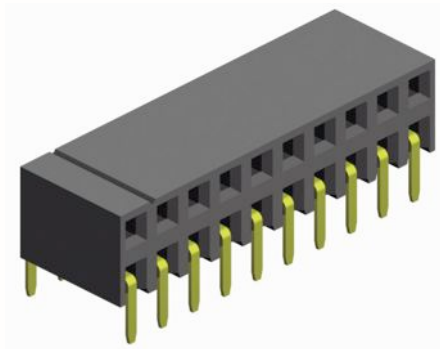
Dual entry low profile 4.30mm height  
 Designed for parallel and vertical board stacking  
 Dual-beam folded contact and low insertion force, mating with 0.50 x 0.50mm Pin Header

How to order

BB2 - x xx - S430 - 55 /2



2.00mm pitch Female Header  
 - THT - side entry type



**APPLICATION AND FEATURES**

- Hi-rel dual beam contact assures reliable PC-Board connections
- Accepts 0.50mm square pins
- 4.40mm height above board
- Stand-off's facilitate post solder cleaning

**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	(RoHS compliant) Phosphor bronze
Contact resistance	20 mΩ max.	Insulator material	(RoHS compliant) Nylon UL 94 V-0
Withstanding voltage	500 V AC		

**How to order**

BH 2 - xxx - R 450 - 55 /2

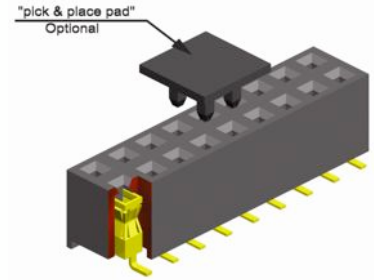
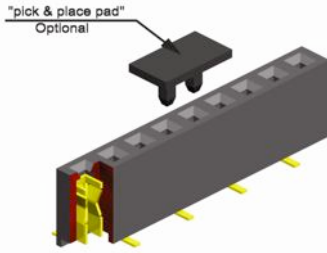
**Nbr of contacts**

004 to 050

**Plating**

55 = gold

Other platings on request

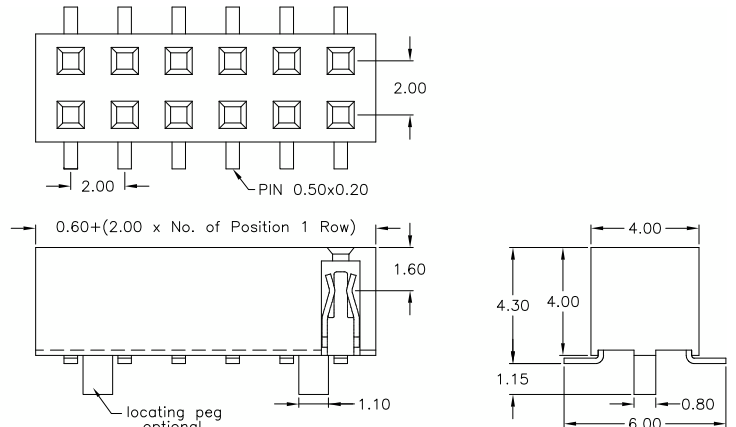
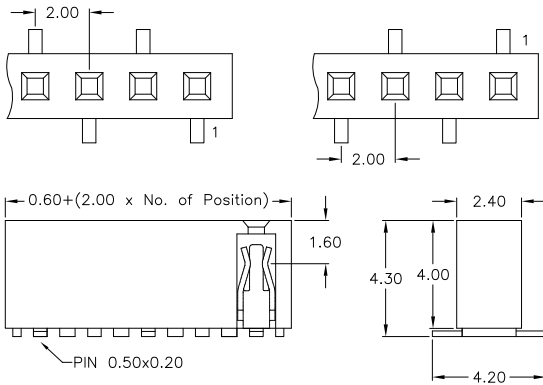


Foot style

430

431

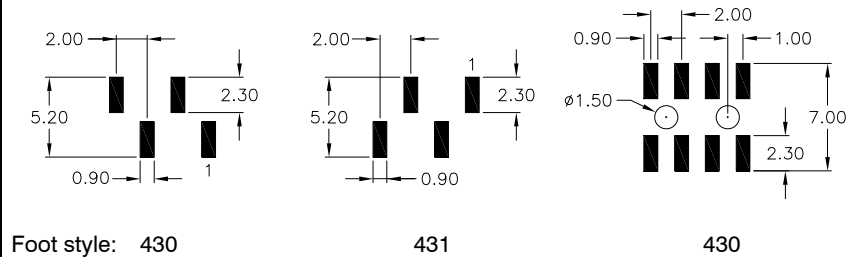
430



**APPLICATION AND FEATURES**

- **Standard: tube packing and without "pick & place pad"**
- Low profile, 4.30mm height.
- Hi-rel dual beam contacts
- Mating with 2.00mm pitch, 0.50mm square, or round pin headers

**PCB Surface Mount Layout**



Current rating  
Insulator resistance  
Contact resistance  
Withstanding voltage

1 A  
1000 MΩ min.  
20 mΩ max.  
500 V AC

Operating temperature  
Processing temperature

- 40°C to +105°C  
+250°C +0/-5°C  
for 10sec.

Contact material (RoHS compliant)  
Insulator material (RoHS compliant)

Phosphor Bronze  
Nylon UL 94 V-0

**SPECIFICATIONS**

How to order

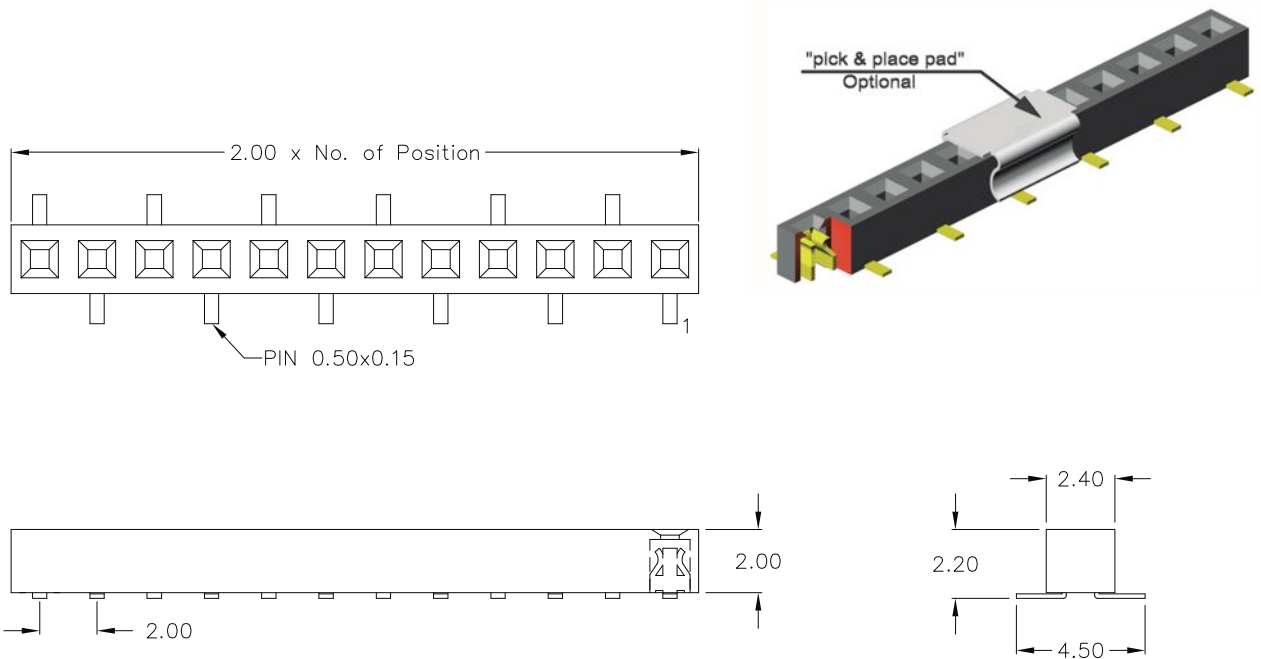
BS x - xxx - H xxx - 55 / 2 X

Rows	Nbr of contacts	Foot style	Plating	Packing and "pick & place pad" Option
1 single row	003 to 040	430 (standard) 431 (option) Pls. choose 430 style if odd pin count	55 = gold	A = tube packing; with pick & place pad B = reel packing; with pick & place pad
2 dual row	006 to 080	430	Other platings on request	<b>without "locating pegs"</b> A = tube packing; with pick & place pad B = reel packing; with pick & place pad <b>with "locating pegs"</b> C = tube packing; without pick & place pad D = tube packing; with pick & place pad E = reel packing; with pick & place pad

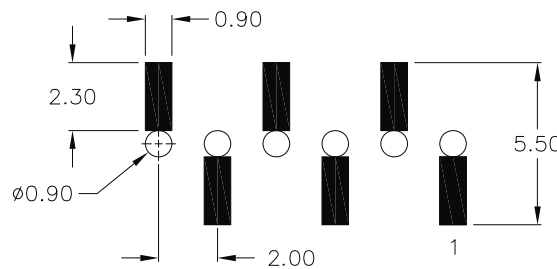


# 2.00mm pitch Female Header

- SMT - Top & Bottom Entry 2.20mm profile



### PCB Surface Mount & Hole Layout



### APPLICATION AND FEATURES

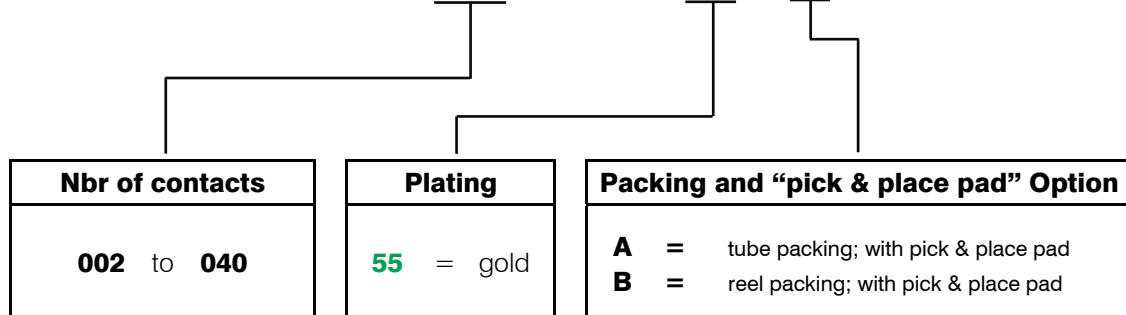
- **Standard: tube packing and without "pick & place pad"**
- Low profile, 2.20mm height above PCB available
- Mating with 2.00mm pitch, 0.50mm square, or round pin headers
- Designed for board to board small spacing interconnection

### SPECIFICATIONS

Current rating	1 A
Insulator resistance	1000 M $\Omega$ min.
Contact resistance	20 m $\Omega$ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material (RoHS compliant)	Phosphor Bronze
Insulator material (RoHS compliant)	Nylon UL 94 V-0

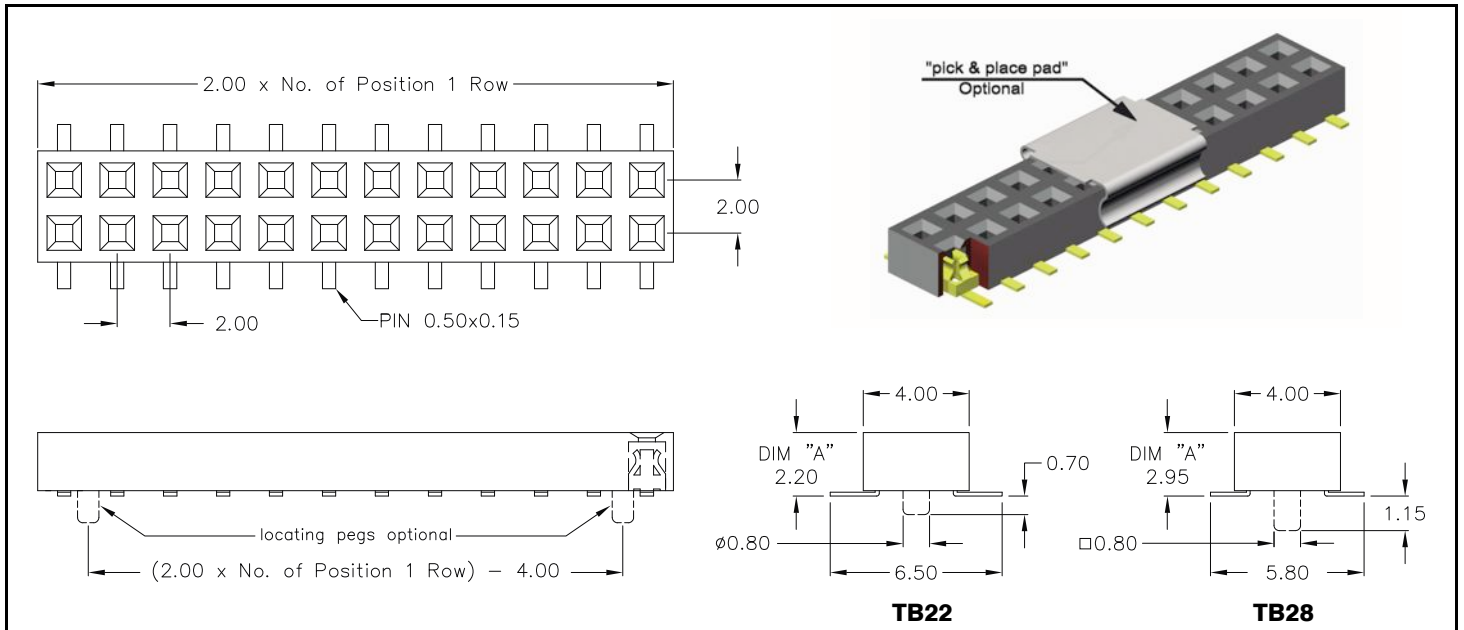
### How to order

BS 1 - xxx - TB 22 - 55 /2 X

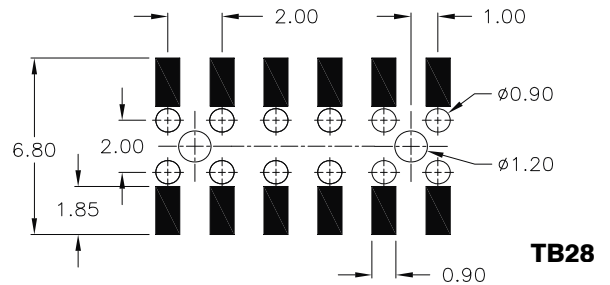
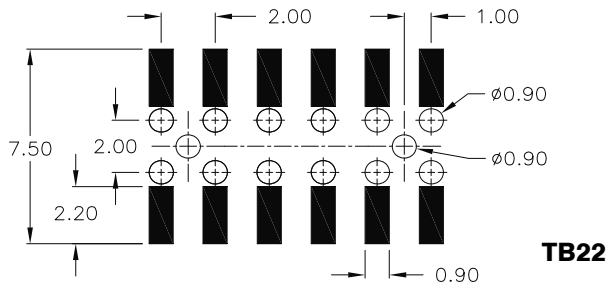


When using this female connector as a bottom entry connector, we recommend that the pin header pins protrude by around 2.00mm above the surface of the female connector after assembly. This will avoid any risk of separation of the pin header from the female header during shock and vibration.

# 2.00mm pitch Female Header - SMT - Top & Bottom Entry 2.20mm & 2.95mm profile



## PCB Surface Mount & Hole Layout



## APPLICATION AND FEATURES

- **Standard: tube packing, without "locating pegs" and "pick & place pad"**
- Low profile, 2.20mm and 2.95mm height above PCB available
- Mating with 2.00mm x 2.00mm pitch, 0.50mm square, or round pin headers
- Designed for board to board small spacing interconnection

## SPECIFICATIONS

Current rating	1 A
Insulator resistance	1000 M $\Omega$ min.
Contact resistance	20 m $\Omega$ max.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) Nylon UL 94 V-0

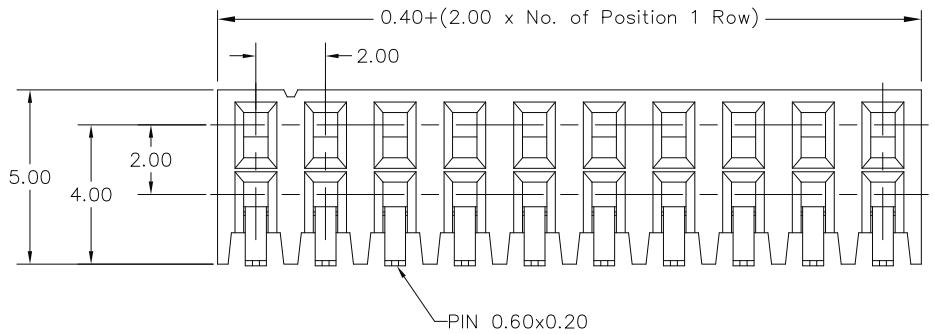
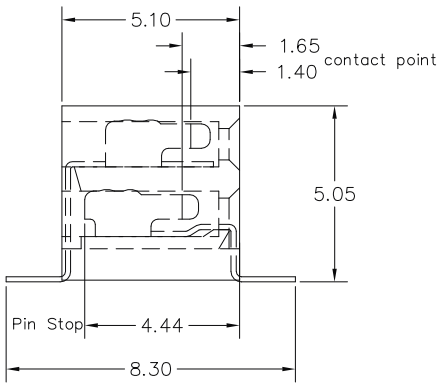
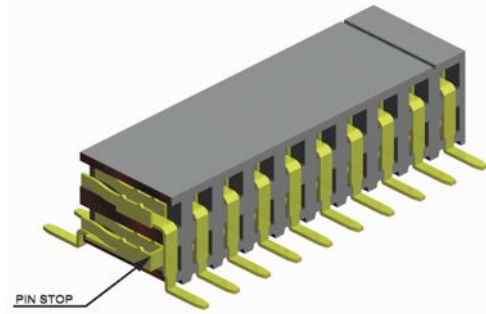
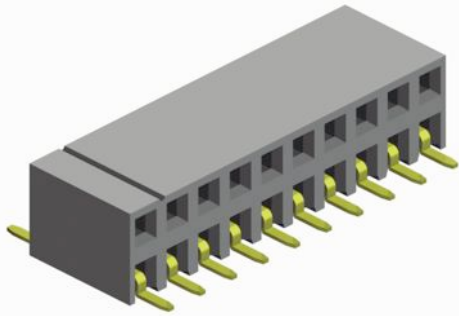
## How to order

BS 2 - xxx - TB xx - 55 /2 X

Nbr of contacts	Version		Plating	Packing and "pick & place pad" Option
006 to 080	22	DIM „A“ = 2.20 mm	55 = gold	<b>without "locating pegs"</b>
006 to 070	28	DIM „A“ = 2.95 mm		<b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
				<b>with "locating pegs"</b>
				<b>C</b> = tube packing; without pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad

When using this female connector as a bottom entry connector, we recommend that the pin header pins protrude by around 2.00mm above the surface of the female connector after assembly. This will avoid any risk of separation of the pin header from the female header during shock and vibration.

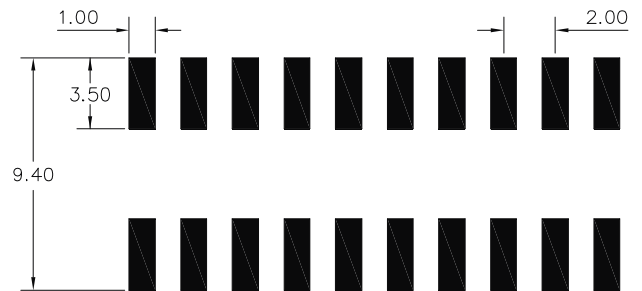
2.00mm pitch Female Header  
- SMT- side entry



**APPLICATION AND FEATURES**

- Hi-rel dual beam contact with „Pin Stop“ assures reliable connections
- Accepts 0.50mm square pins
- 5.00mm height above board
- Automatic assembly to PCB possible

**PCB Surface Mount Layout**



**SPECIFICATIONS**

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material <i>(RoHS compliant)</i>	Phosphor Bronze
Insulator material <i>(RoHS compliant)</i>	Nylon UL 94 V-0

**How to order**

BS 2 - xxx - R 500 - 55 /2 X

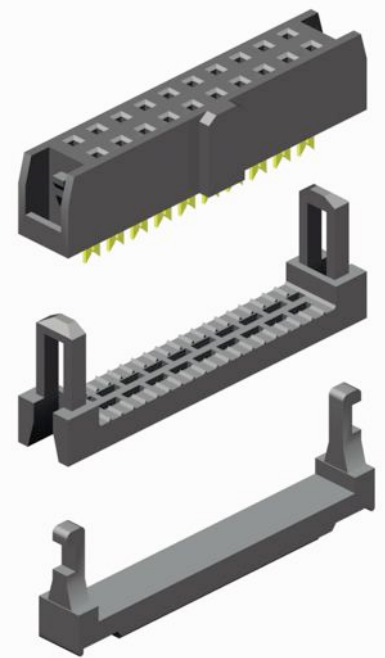
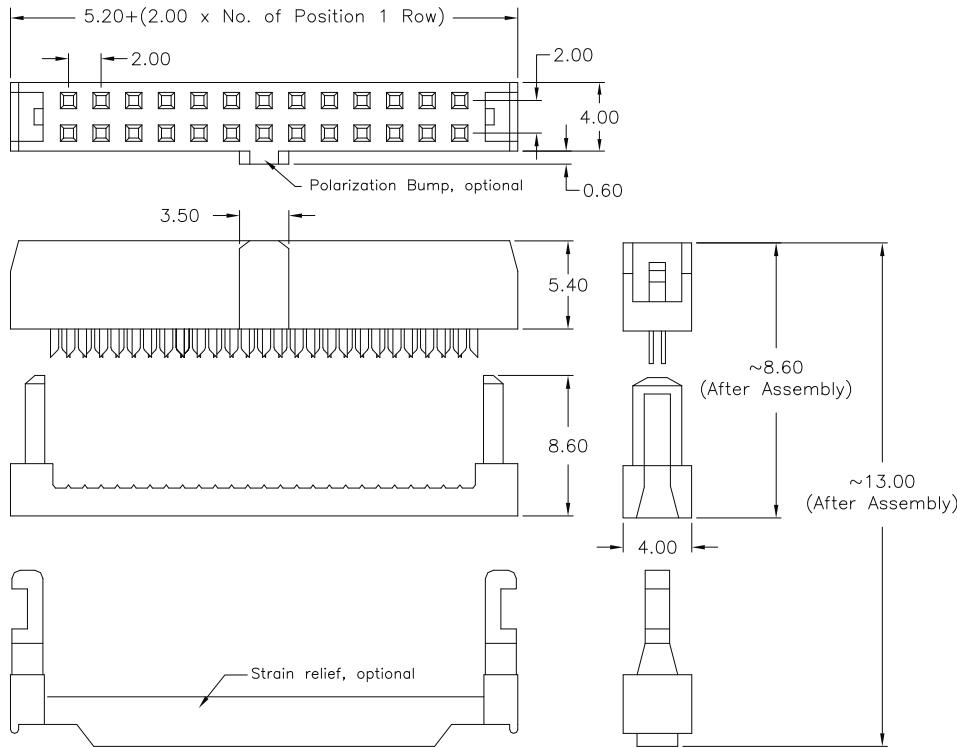
**Nbr of contacts**  
**004 to 050**

**Plating**  
**55 = gold**  
Other platings on request

**Packing Option**  
**R = Reel**  
No suffix for tube packing

2.00mm pitch

IDC – Female Connector



**SPECIFICATIONS**

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	20 mΩ max.	Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)
Withstanding voltage	500 V AC		

**APPLICATION AND FEATURES**

Designed to mate with 0.50mm square pins Box Header

High Quality dual beam contacts

Accepts 26 & 28 AWG 1.00mm flat ribbon cable.

How to order

**IDS - xxx - X 200 - 95 (/ P)**

Nbr of contacts
available <b>with</b> strain relief: <b>010; 012; 014; 016; 018; 020</b> <b>022; 024; 026; 028; 030; 032</b> <b>034; 040; 044; 050</b>
available <b>without</b> strain relief: <b>006; 008; 010; 012; 014; 016</b> <b>018; 020; 022; 024; 026; 028</b> <b>030; 032; 034; 040; 044; 050</b> <b>054; 056; 060; 064; 068</b>

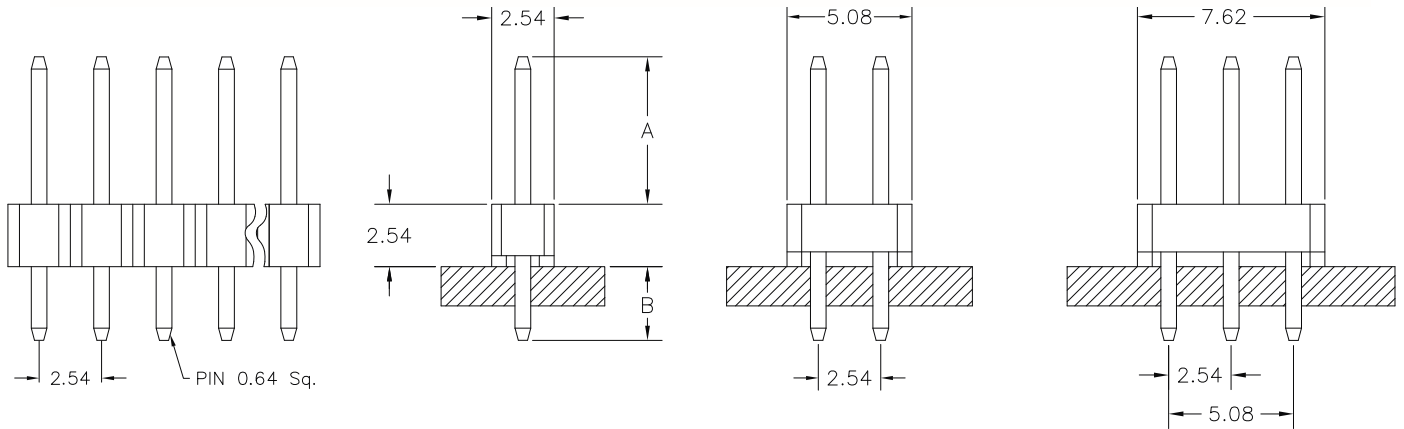
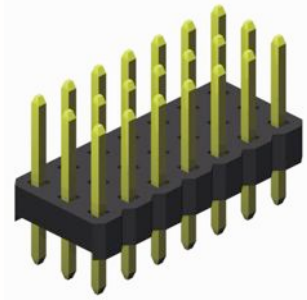
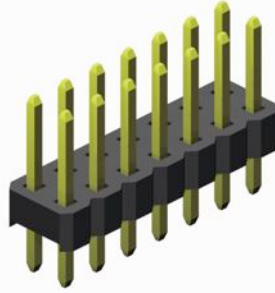
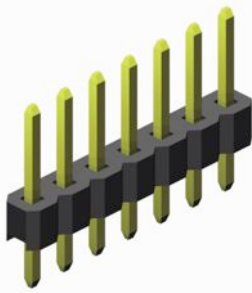
Strain relief
<b>S</b> = with <b>W</b> = without

Plating
<b>95</b> = tin / gold <i>(tin leadfree)</i> Other platings on request

Option
<b>P</b> Polarization bump

# 2.54mm pitch Pin Header

- THT - straight



Pin code	DIM "A" mm/inch	DIM "B" mm/inch	Pin code	DIM "A" mm/inch	DIM "B" mm/inch	Pin code	DIM "A" mm/inch	DIM "B" mm/inch
<b>116 / 01</b>	<b>6.00/.236</b>	<b>3.10/.122</b>	<b>105 / 04</b>	6.00/.236	2.00/.079	<b>168 / 01</b>	11.00/.433	3.30/.130
<b>076 / 01</b>	3.40/.124	2.70/.106	<b>108 / 09</b>	6.10/.240	2.16/.085	<b>176 / 02</b>	11.80/.465	3.30/.130
<b>125 / 04</b>	3.30/.123	6.70/.264	<b>147 / 06</b>	6.10/.240	6.10/.240	<b>184 / 10</b>	12.30/.484	3.60/.142
<b>105 / 05</b>	4.20/.165	3.60/.142	<b>147 / 02</b>	7.00/.276	5.11/.201	<b>186 / 01</b>	12.40/.488	3.80/.150
<b>108 / 10</b>	4.30/.169	4.00/.157	<b>125 / 01</b>	7.00/.276	3.00/.118	<b>184 / 02</b>	12.60/.496	3.00/.118
<b>105 / 01</b>	5.00/.197	3.00/.118	<b>125 / 02</b>	7.50/.295	2.54/.100	<b>216 / 07</b>	12.80/.504	6.30/.248
<b>108 / 12</b>	5.00/.197	3.30/.130	<b>135 / 05</b>	8.00/.315	2.80/.110	<b>184 / 01</b>	12.90/.508	3.00/.118
<b>108 / 11</b>	5.50/.216	2.80/.110	<b>140 / 03</b>	8.50/.335	3.00/.118	<b>185 / 04</b>	13.00/.512	3.00/.118
<b>108 / 02</b>	5.70/.224	2.54/.100	<b>140 / 02</b>	9.00/.354	2.54/.100	<b>204 / 01</b>	14.90/.586	3.00/.118
<b>139 / 01</b>	5.70/.224	5.70/.224	<b>155 / 01</b>	9.80/.386	3.15/.124	<b>228 / 01</b>	17.30/.681	3.00/.118
<b>108 / 01</b>	5.80/.228	2.50/.098	<b>184 / 03</b>	10.50/.413	5.11/.201	<b>261 / 01</b>	17.80/.700	5.80/.228
<b>113 / 02</b>	5.80/.228	3.00/.118	<b>155 / 06</b>	10.80/.425	2.20/.087	<b>240 / 02</b>	18.50/.728	3.00/.118
<b>100 / 01</b>	6.00/.236	1.50/.059	<b>159 / 06</b>	10.80/.425	2.54/.100	<b>245 / 01</b>	19.00/.748	3.00/.118

Standard dimension & pin code

Many other dimensions available on request

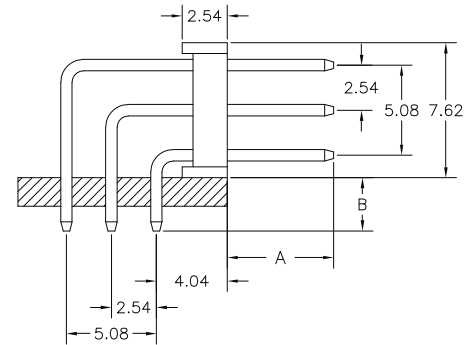
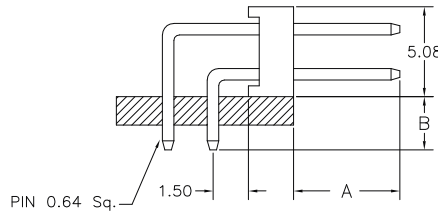
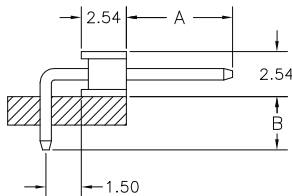
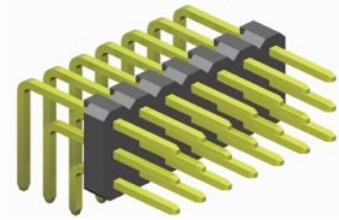
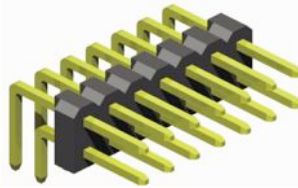
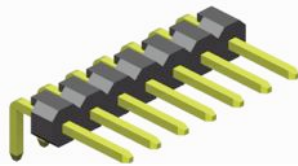
## SPECIFICATIONS

Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Insulator material (RoHS compliant)	P.B.T. or Nylon UL 94 V-0
Withstanding voltage	500 V AC	Contact material (RoHS compliant)	<b>Standard</b> : P.B.T. Brass
Breakdown voltage	1800 VRMS min.		

## How to order

SL x - xxx - S xxx/xx - 55

Rows	Nbr of pins	Insulator	Pin code	Plating
<b>1</b> = single row	single row = <b>002</b> to <b>040</b>	<b>S</b> = P.B.T.	See above table	<b>55</b> = gold (standard)
<b>2</b> = dual row	dual row = <b>004</b> to <b>080</b>	<b>SH</b> = Nylon		<b>99</b> = tin (leadfree)
<b>3</b> = triple row	triple row = <b>009</b> to <b>120</b>			<b>95</b> = tin/gold (tin leadfree)
				Other platings on request



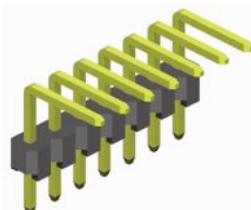
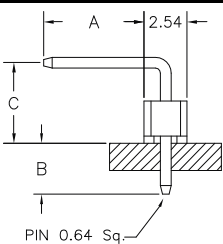
**DOWN ANGLE PIN STYLE**

Pin code	DIM "A" mm/inch	DIM "B" mm/inch	Pin code	DIM "A" mm/inch	DIM "B" mm/inch	Pin code	DIM "A" mm/inch	DIM "B" mm/inch	Pin code	DIM "A" mm/inch	DIM "B" mm/inch
100/03	2.50/.098	2.50/.098	125/11	5.60/.220	2.10/.083	176/01	7.00/.276	6.00/.236	170/02	8.80/.346	3.30/.130
103/01	2.75/.108	2.75/.108	132/01	5.70/.224	2.50/.098	147/03	7.40/.291	2.54/.100	165/01	9.00/.354	2.54/.100
105/02	2.80/.110	3.00/.118	133/01	5.70/.224	2.85/.112	133/03	7.50/.295	1.50/.059	184/05	9.40/.370	4.60/.181
106/01	2.80/.110	2.80/.110	155/02	5.70/.224	5.11/.201	136/06	7.50/.295	2.54/.100	176/03	9.70/.382	3.15/.124
108/01	3.00/.118	3.00/.118	126/02	5.80/.228	2.30/.091	140/04	7.80/.307	1.50/.059	203/04	9.70/.382	5.80/.228
116/03	3.00/.118	4.00/.157	140/05	5.80/.228	3.60/.142	155/05	7.80/.307	3.00/.118	181/01	9.90/.390	3.20/.126
106/02	3.30/.130	2.30/.090	140/11	5.80/.228	3.00/.118	136/01	8.00/.315	3.60/.142	180/05	9.96/.392	3.30/.130
111/01	3.50/.138	3.00/.118	141/01	5.80/.228	4.80/.189	184/04	8.00/.315	5.80/.228	251/01	10.00/.394	10.00/.394
116/04	3.50/.138	3.50/.138	159/01	5.90/.232	5.11/.201	187/02	8.00/.315	6.00/.236	184/09	10.40/.409	3.30/.130
108/02	3.60/.142	2.50/.098	125/16	6.00/.236	2.00/.079	182/01	8.10/.319	5.10/.201	186/01	10.70/.421	3.30/.130
111/02	3.70/.136	2.75/.108	140/01	6.00/.236	3.00/.118	155/04	8.20/.323	2.54/.100	203/05	12.00/.472	3.30/.130
120/01	4.50/.177	2.50/.098	140/09	6.20/.244	3.15/.124	159/04	8.20/.323	3.00/.118	203/03	12.50/.492	3.00/.118
125/07	4.50/.177	3.30/.130	149/01	6.70/.264	3.20/.126	203/06	8.23/.324	7.00/.276	203/02	13.00/.512	2.54/.100
125/06	4.70/.185	3.15/.124	148/01	6.75/.266	2.90/.114	246/01	8.30/.327	11.70/.461	209/01	13.10/.516	3.00/.118
147/04	4.80/.189	5.11/.201	147/02	6.90/.272	3.30/.130	159/02	8.50/.335	2.54/.100	216/03	13.60/.535	3.30/.130
125/09	5.30/.209	2.54/.100	140/03	7.00/.276	2.00/.079	165/02	8.60/.339	3.30/.130			
133/02	5.30/.209	3.30/.013	147/01	7.00/.276	3.00/.118	169/01	8.60/.339	3.30/.130			

Standard dimension & pin code

Many other dimensions available on request

**UP ANGLE PIN STYLE**



Pin code	DIM "A" mm/inch	DIM "B" mm/inch	DIM "C" mm/inch	Pin code	DIM "A" mm/inch	DIM "B" mm/inch	DIM "C" mm/inch
151/01	3.30/.130	7.00/.276	3.84/.151	160/05	6.00/.236	3.00/.118	6.04/.238
170/01	3.30/.130	8.60/.339	3.84/.151	175/03	6.00/.236	3.00/.118	7.54/.297
190/02	3.30/.130	10.60/.417	3.84/.151	155/03	6.20/.244	2.54/.100	6.30/.248
114/01	4.00/.157	2.60/.102	4.25/.167	130/01	7.00/.276	2.54/.100	3.00/.118
190/01	4.25/.167	3.00/.118	8.00/.315	184/15	7.00/.276	3.00/.118	6.35/.250
155/09	5.10/.201	3.10/.122	6.41/.252	184/06	8.00/.315	3.60/.142	6.30/.248
135/11	6.00/.236	3.00/.118	3.50/.138	149/02	9.70/.382	1.50/.059	2.80/.110
147/07	6.00/.236	3.00/.118	4.80/.189				

Specifications: Refer to straight pin headers

Many other dimensions available on request

**How to order**

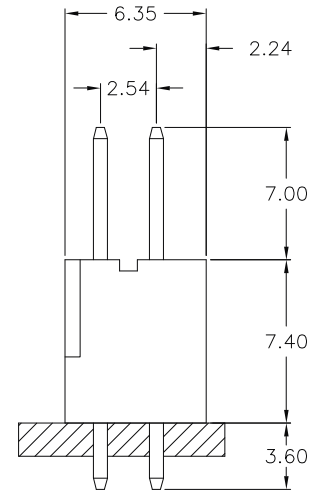
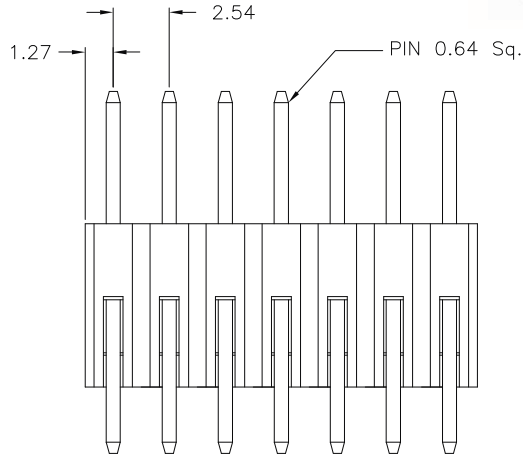
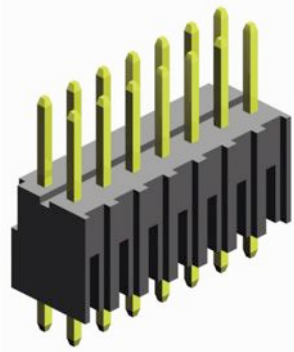
SL x - xxx - X xxx/xx - 55

Rows	Nbr of pins	Pin style & Insulator	Pin code	Plating
<p>1 = single row</p> <p>2 = dual row</p> <p>3 = triple row</p>	<p>single row = <b>002</b> to <b>040</b></p> <p>dual row = <b>004</b> to <b>080</b></p> <p>triple row = <b>009</b> to <b>120</b></p>	<p><b>R</b> = Down angle (P.B.T. Insulator)</p> <p><b>RH</b> = Down angle (Nylon Insulator)</p> <p><b>U</b> = Up angle (P.B.T. Insulator)</p> <p><b>UH</b> = Up angle (Nylon Insulator)</p>	<p>See above table</p>	<p><b>55</b> = gold (standard)</p> <p><b>99</b> = tin (leadfree)</p> <p><b>95</b> = tin/gold (tin leadfree)</p> <p>Other platings on request</p>

2.54mm pitch Pin Header  
 - THT - high plastic base

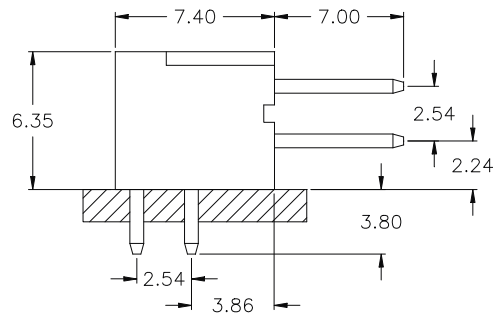
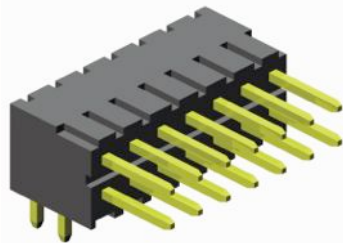


Straight style - 7.40mm body



**S 740**

Right angle style - 6.35mm body

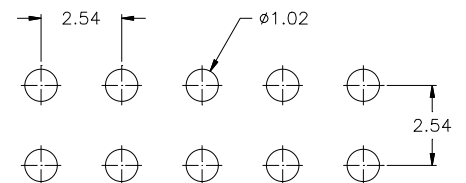


**R 635**

**Specifications**

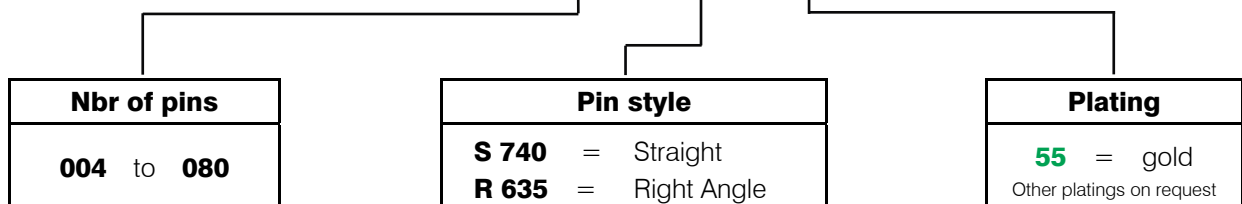
Current rating	3 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	Brass
Insulator material	P.B.T. UL 94 V-0

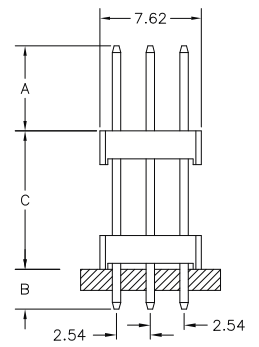
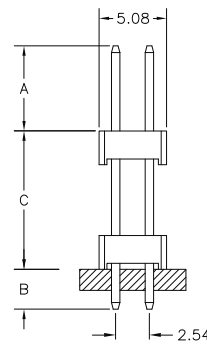
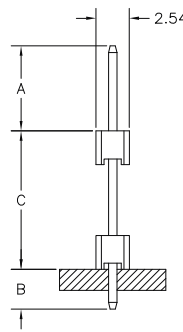
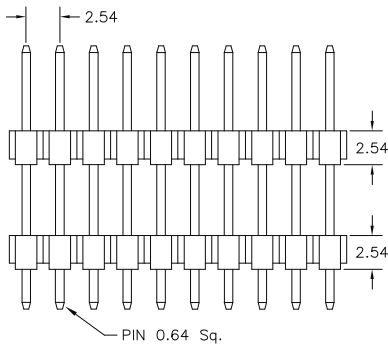
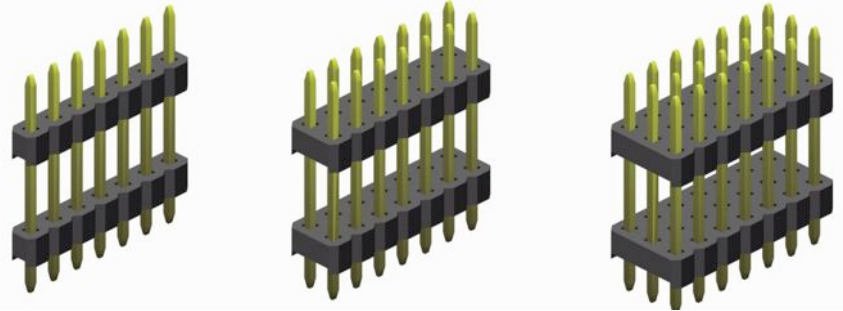
**PCB Hole layout**



How to order

SE 2 - xxx - X xxx - 55





**PIN STYLE**

Pin code	DIM "A" mm/inch	DIM "B" mm/inch	DIM "C" mm/inch	Pin code	DIM "A" mm/inch	DIM "B" mm/inch	DIM "C" mm/inch
113 / 01	3.00/.118	3.30/.130	5.00/.197	240 / 03	6.00/.236	3.00/.118	15.00/.590
249 / 09	15.00/.590	3.90/.153	6.00/.236	249 / 06	6.00/.236	3.40/.134	15.50/.610
185 / 02	8.50/.335	3.00/.118	7.00/.276	290 / 04	6.50/.256	6.50/.256	16.00/.630
137 / 01	3.00/.118	2.30/.090	8.40/.331	249 / 08	5.30/.209	2.60/.102	17.00/.669
260 / 01	13.90/.547	3.60/.142	8.50/.335	216 / 05	1.95/.077	1.95/.077	17.70/.697
147 / 08	3.00/.118	3.00/.118	8.70/.343	263 / 01	5.50/.216	2.80/.110	18.00/.709
216 / 08	6.30/.248	6.30/.248	9.00/.354	340 / 01	9.00/.354	6.00/.236	19.00/.748
198 / 02	6.00/.236	3.00/.118	10.40/.409	290 / 01	6.50/.256	2.50/.098	20.00/.787
184 / 13	5.30/.209	2.50/.984	10.60/.417	276 / 01	3.20/.126	3.20/.126	21.20/.835
198 / 03	6.50/.256	2.70/.106	10.60/.417	308 / 03	6.00/.236	3.30/.130	21.50/.846
216 / 10	6.50/.256	3.60/.142	11.50/.453	342 / 01	6.10/.240	6.10/.240	22.00/.866
198 / 01	5.50/.217	2.50/.984	11.80/.465	342 / 02	3.00/.118	9.20/.362	22.00/.866
211 / 01	6.00/.236	2.90/.114	12.20/.480	352 / 01	3.00/.118	9.20/.362	23.00/.905
235 / 01	7.00/.275	3.60/.142	12.90/.508	378 / 02	7.30/.287	3.30/.130	27.20/1.071
255 / 01	9.00/.354	3.60/.142	12.90/.508	378 / 01	5.30/.209	2.50/.984	30.00/1.181
249 / 07	8.80/.346	2.50/.984	13.60/.535	408 / 04	5.80/.228	2.50/.984	32.50/1.280
216 / 02	5.30/.209	2.50/.984	13.80/.543	516 / 01	6.80/.268	3.30/.130	41.50/1.634
290 / 08	7.25/.285	7.25/.285	14.50/.571	606 / 01	6.00/.236	3.10/.122	51.50/2.028
238 / 01	5.90/.232	3.20/.126	14.70/.279				

Many other dimensions available on request

**SPECIFICATIONS**

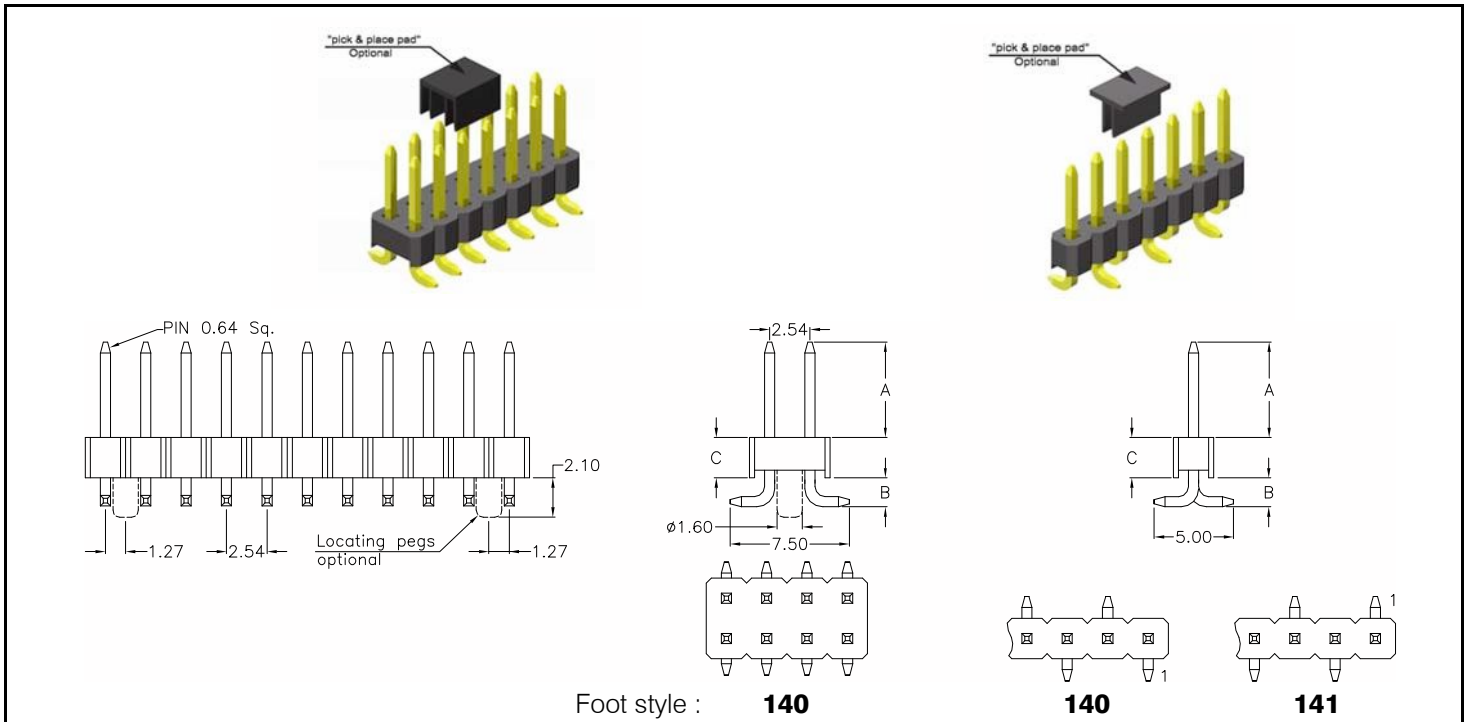
Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Insulator material (RoHS compliant)	P.B.T. or Nylon UL 94 V-0
Withstanding voltage	500 V AC	Contact material (RoHS compliant)	Standard : P.B.T.
Breakdown voltage	1800 VRMS min.		Brass

How to order

SP x - xxx - S xxx/xx - xx

Rows	Nbr of pins	Insulator	Pin code	Plating
1 = single row	single row = <b>002</b> to <b>040</b>	<b>S</b> = P.B.T.	See above table	<b>55</b> = gold (standard)
2 = dual row	dual row = <b>004</b> to <b>080</b>	<b>SH</b> = Nylon		<b>99</b> = tin (leadfree)
3 = triple row	triple row = <b>009</b> to <b>120</b>			<b>95</b> = tin/gold (tin leadfree)
				Other platings on request

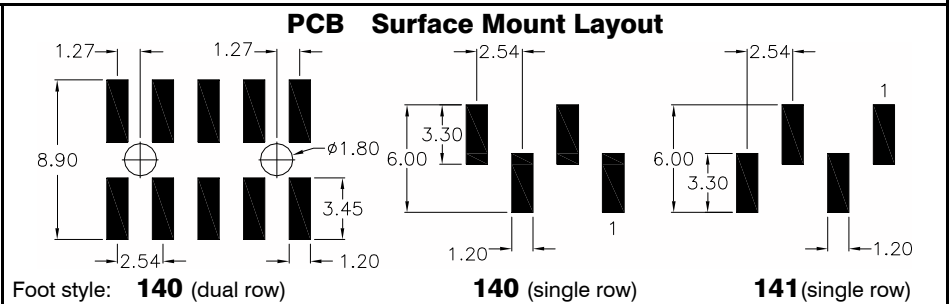




Foot style : **140** **140** **141**

**APPLICATION AND FEATURES**

- **Standard: tube packing and without "pick & place pad"**
- Standard Pin code **01**, others on request
- Mating with 2.54mm female headers



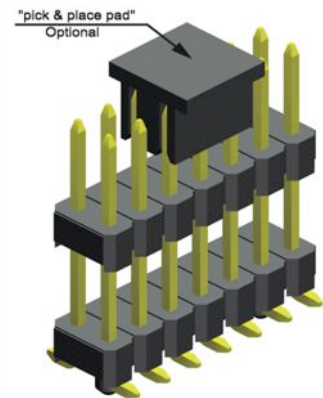
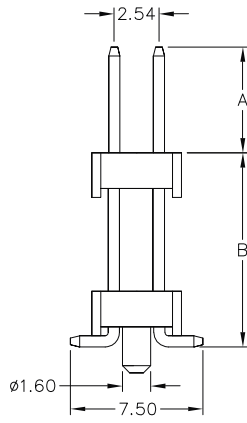
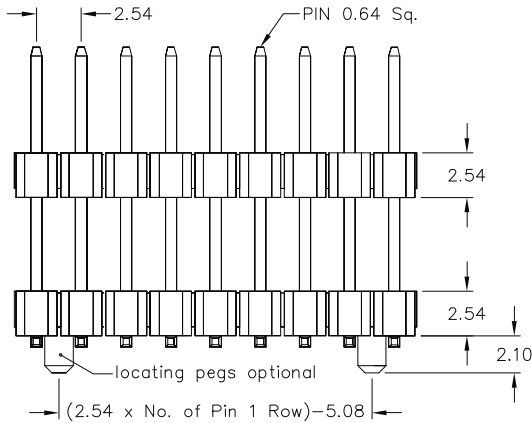
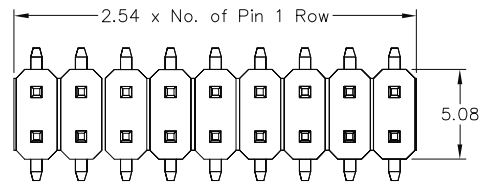
**SPECIFICATIONS**

Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Processing temperature	+250°C +0/-5°C for 5sec.
Withstanding voltage	500 V AC	Contact material	(RoHS compliant) Brass
		Insulator material	(RoHS compliant) Nylon UL 94 V-0

How to order

SS x - xxx - H 140 / xx - 55 X

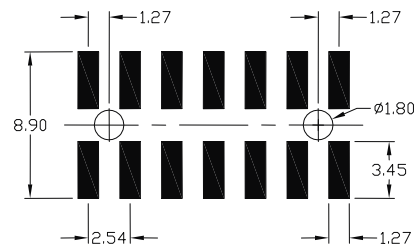
Rows	Nbr of pins	Insulator style	Foot style	Pin code	DIM"A" (mm)	DIM"B" (mm)	DIM"C" (mm)	Plating	Packing and "pick & place pad" Option	
1 single row	004 to 040	<b>H</b> (=Standard) if DIM"C"=2.54mm	<b>140</b> <b>141</b> <small>Pls. choose 140 style if odd pin count.</small>	<b>00</b>	5.00	1.00	1.50	<b>55</b> = gold  Other platings on request	<b>without "locating pegs"</b> <b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad	
				<b>01</b>	6.00	1.82	2.54			
2 dual row	004 to 080	<b>TH</b> if DIM"C"=1.50mm  <b>Please note:</b> 1.50mm Insulator is only available without locating peg.	<b>140</b>	<b>02</b>	10.70	1.27	2.54			<b>with "locating pegs"</b> (only available for dual row pin headers) <b>C</b> = tube packing; w/o pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad
				<b>03</b>	14.20	0.64	2.54			
				<b>04</b>	6.00	0.64	2.54			
				<b>05</b>	10.70	1.82	2.54			
				<b>06</b>	6.00	1.27	2.54			
				<b>07</b>	4.00	1.00	1.50			
				<b>08</b>	9.60	1.90	2.54			
				<b>09</b>	8.13	1.27	2.54			
				<b>10</b>	3.00	1.96	2.54			
				<b>11</b>	8.10	0.72	2.54			
				<b>12</b>	3.23	3.22	2.54			
<b>13</b>	4.85	2.30	2.54							
				Other dimensions on request						



**APPLICATION AND FEATURES**

- **Standard: tube packing, without "locating pegs" and "pick & place pad"**
- Designed for "board to board" spacing
- Variable terminal length available
- Mate with female header 2.54mm x 2.54mm pitch

**PCB Surface Mount Layout**



**SPECIFICATIONS**

Current rating 3 A  
 Insulator resistance 1000 MΩ min.  
 Withstanding voltage 500 V AC

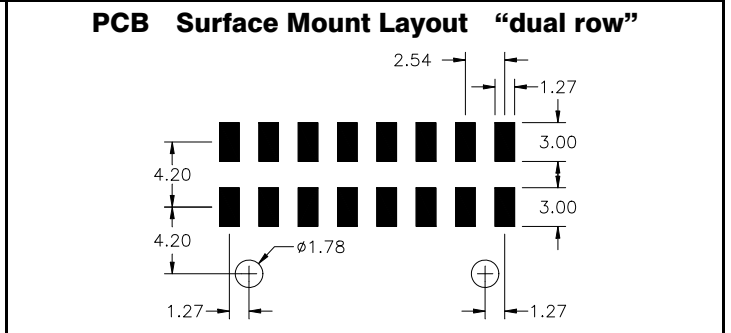
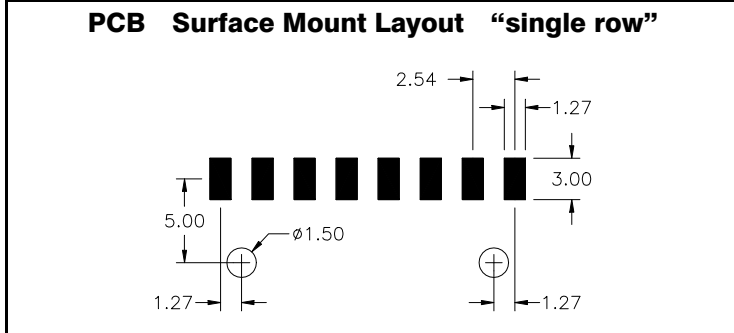
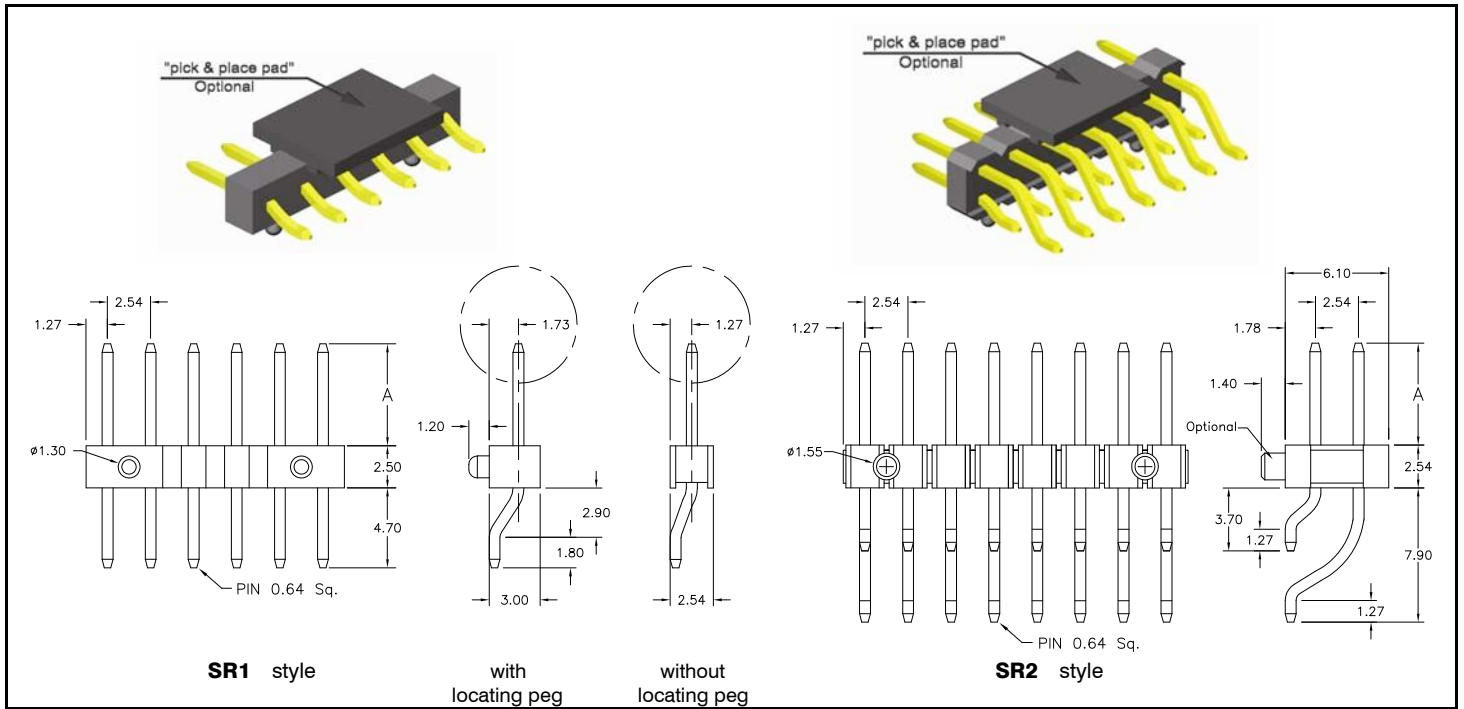
Operating temperature - 40°C to +105°C  
 Processing temperature +250°C +0/-5°C for 5sec.  
 Contact material (RoHS compliant) Copper alloy  
 Insulator material (RoHS compliant) Nylon UL 94 V-0

**How to order**

SP2 - xxx - H xxx/xx - 55 X

Nbr of pins	Pin code	DIM "A"	DIM "B"	Plating	Packing and "pick & place pad" Option
004 to 080	160/16	3.50 mm	5.30 mm	55 = gold  Other platings on request	<b>without "locating pegs"</b> A = tube packing; with pick & place pad B = reel packing; with pick & place pad
	160/03	5.50 mm	6.40 mm		
	160/12	5.50 mm	7.50 mm		<b>with "locating pegs"</b> C = tube packing; without pick & place pad D = tube packing; with pick & place pad E = reel packing; with pick & place pad
	160/04	7.50 mm	9.40 mm		
	160/07	5.90 mm	10.60 mm		
	160/09	3.70 mm	10.70 mm		
	160/01	6.00 mm	11.40 mm		
	160/15	6.90 mm	12.50 mm		
	160/14	8.80 mm	13.60 mm		
	160/06	5.50 mm	14.00 mm		
	160/17	7.00 mm	14.50 mm		
	160/05	6.00 mm	15.50 mm		
	160/13	8.80 mm	16.10 mm		
	160/02	4.50 mm	17.00 mm		
160/08	6.00 mm	28.00 mm			
160/10	2.70 mm	28.30 mm			
160/11	4.00 mm	34.30 mm			
Other dimensions on request					

2.54mm pitch Pin Header - slanted -  
- SMT - single and dual row

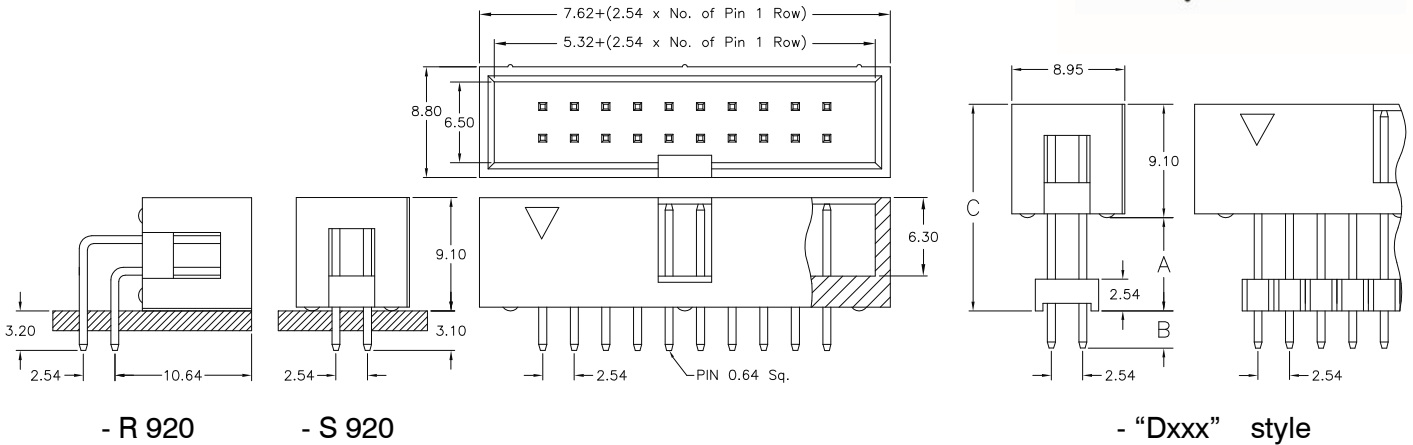
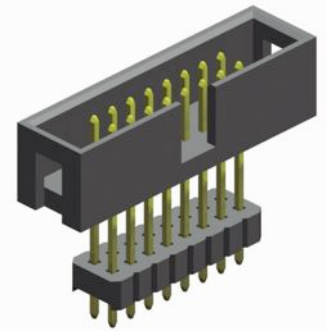
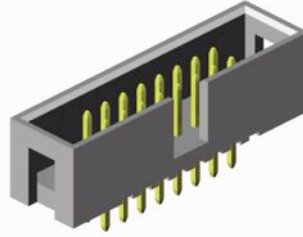
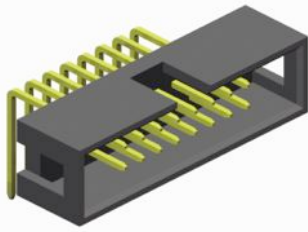


SPECIFICATIONS			
Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Processing temperature	+250°C +0/-5°C for 10sec.
Withstanding voltage	500 V AC	Contact material	(RoHS compliant) Copper alloy
		Insulator material	(RoHS compliant) SR1 = Nylon UL 94 V-0 SR2 = LCP UL 94 V-0

How to order

SR x - xxx - H xxx/xx - xx X

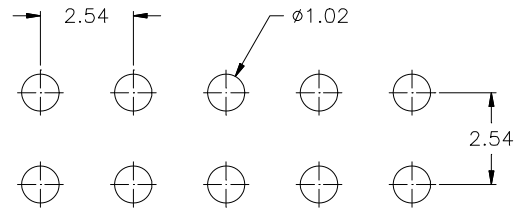
Rows	Nbr of pins	Pin code	DIM "A"	Plating	Packing and "pick & place pad" Option (standard: Tube packing and w/o pick & place pad)
1 single row	without locating pegs <b>002 to 040</b>	<b>135/00</b>	3.00 mm	55 = gold  95 = tin/gold (tin leadfree)  Other platings on request	without "locating pegs" <b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
	with locating pegs <b>003 to 030</b>	<b>135/01</b>	3.60 mm		
2 dual row	<b>006 to 080</b>	<b>135/02</b>	6.00 mm		with "locating pegs" <b>C</b> = tube packing; without pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad
		<b>135/03</b>	6.80 mm		
		<b>135/04</b>	7.20 mm		
		<b>135/05</b>	7.40 mm		
		<b>135/06</b>	10.70 mm		
		<b>135/07</b>	10.40 mm		
		<b>135/08</b>	5.85 mm		
		<b>135/09</b>	8.15 mm		
<b>135/10</b>	10.00 mm				
		Other dimensions on request			



**APPLICATION AND FEATURES**

- Mating devices for female headers, solder tail and IDC Type
- Reliable flat cable to PCB connection
- No ejection latches for space saving

**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	(RoHS compliant) Brass
Withstanding voltage	500 V AC	Insulator material	(RoHS compliant) P.B.T. UL 94 V-0

How to order

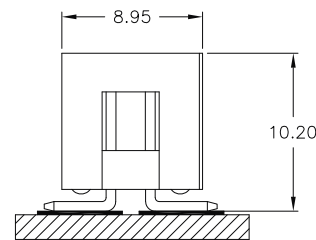
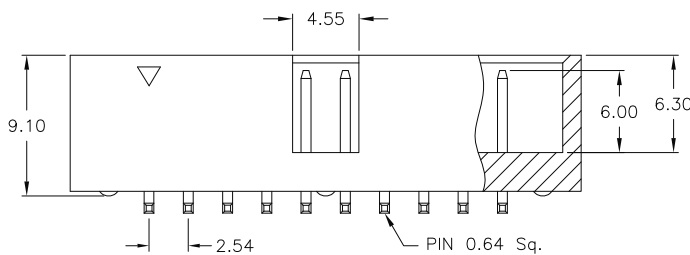
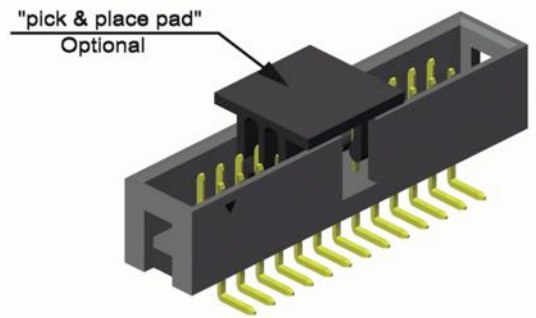
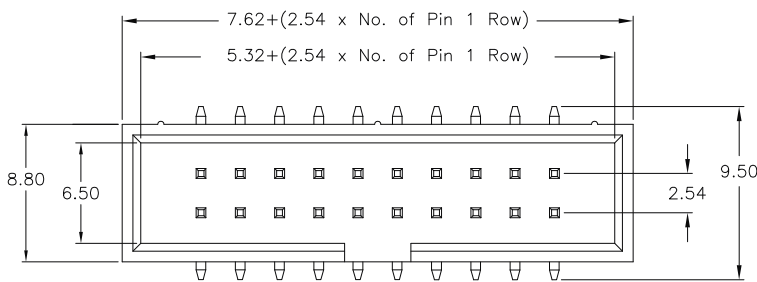
SLS - xxx - X xxx - 55

Nbr of pins
<b>S &amp; R Version:</b> 006; 008; 010; 012; 014; 016 020; 024; 026; 030; 034; 040 044; 050; 060; 064
<b>D Version</b> 006; 008; 010; 012; 014; 016 020; 024; 026; 030; 034; 040 050; 060; 064

Style
<b>S920</b> = straight
<b>R920</b> = right angle
<b>Dxxx</b> = raised style

Pin code for "Dxxx" = raised style	DIM "A" (mm)	DIM "B" (mm)	DIM "C" (mm)
<b>141</b>	5.00	3.00	14.10
<b>166</b>	7.50	3.00	16.60
<b>232</b>	14.10	3.00	23.20
<b>235</b>	14.40	3.00	23.50
Other dimensions on request			

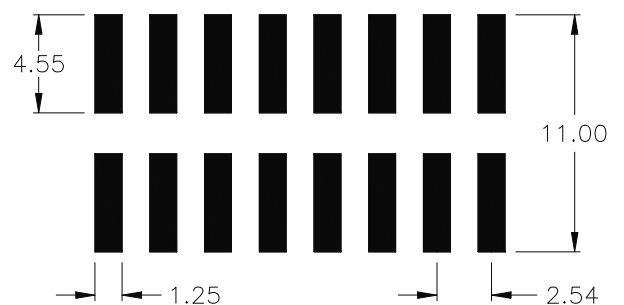
Plating
<b>55</b> = gold
Other platings on request



**APPLICATION AND FEATURES**

- **Standard: tray packing and without "pick & place pad"**
- Also available "reel" packing
- Mating devices for female headers, solder tail and IDC Type
- Reliable flat cable to PCB connection
- No ejector latches for space saving

**PCB Surface Mount Layout**



**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 5sec.
Contact material (RoHS compliant)	Brass
Insulator material (RoHS compliant)	Nylon UL 94 V-0

**How to order**

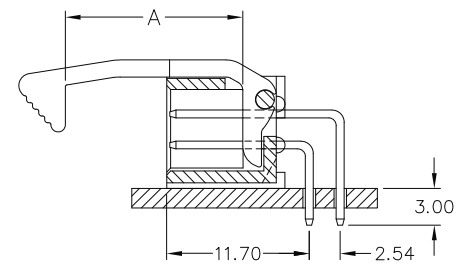
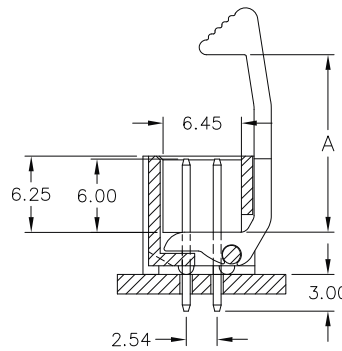
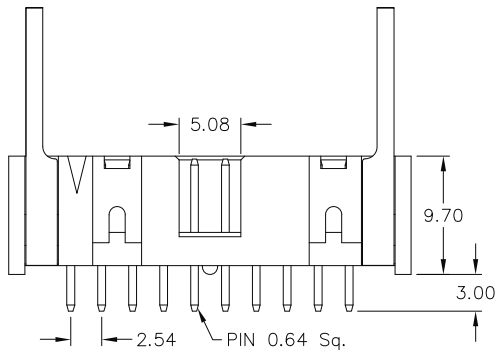
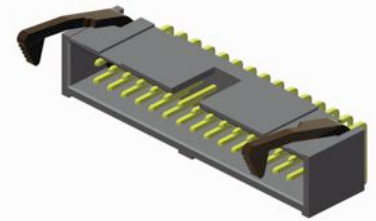
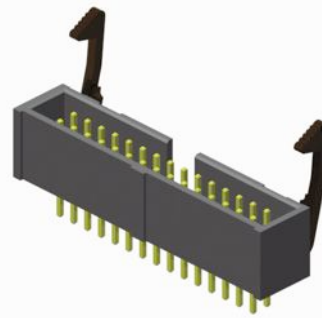
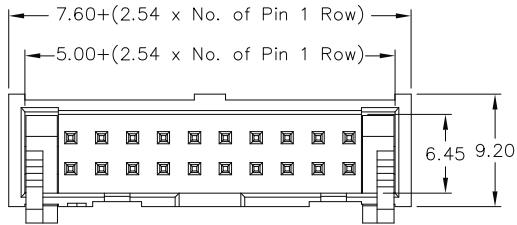
**SLS - xxx - H 885 - 55 / X**

Nbr of pins
<b>006; 008; 010; 012</b>
<b>014; 016; 020; 024</b>
<b>026; 030; 034; 040</b>
<b>044; 050</b>

Plating
<b>55</b> = gold
Other platings on request

Packing and "pick & place pad" Option
<b>F</b> = tray packing; with pick & place pad
<b>T</b> = tube packing; without pick & place pad
<b>A</b> = tube packing; with pick & place pad
<b>B</b> = reel packing; with pick & place pad

2.54mm pitch Box Header  
 - THT - with ejection latches



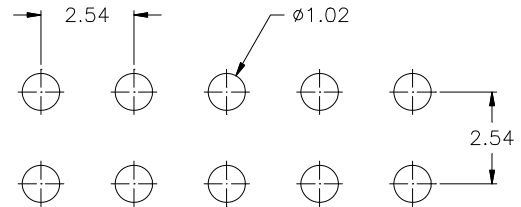
- S103

- R103

**APPLICATION AND FEATURES**

- Mating devices for female headers IDC Type
- Reliable flat cable to PCB connection
- Ejection latches for easy handling

**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Contact material	(RoHS compliant) Copper alloy
Insulator material	(RoHS compliant) P.B.T. UL 94 V-0
	<b>Standard:</b> black

How to order

SLS - xxx - X 103 - 55 / X

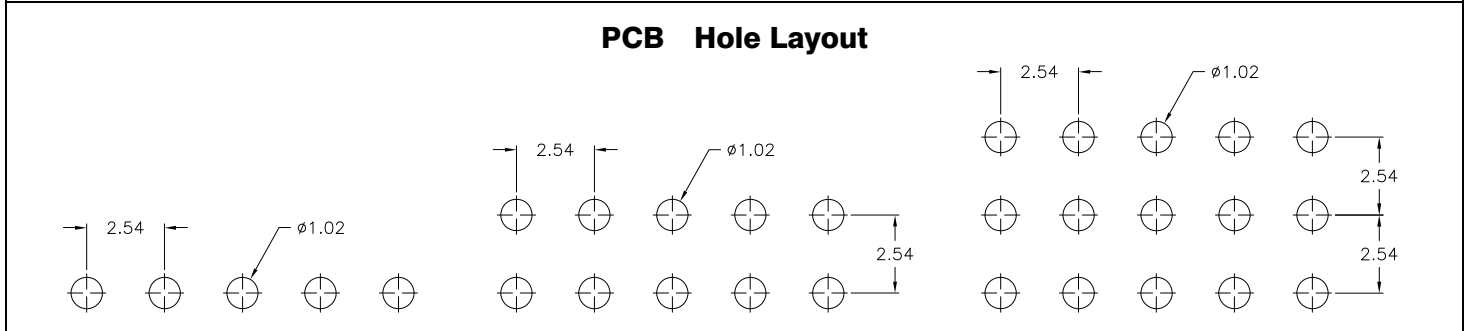
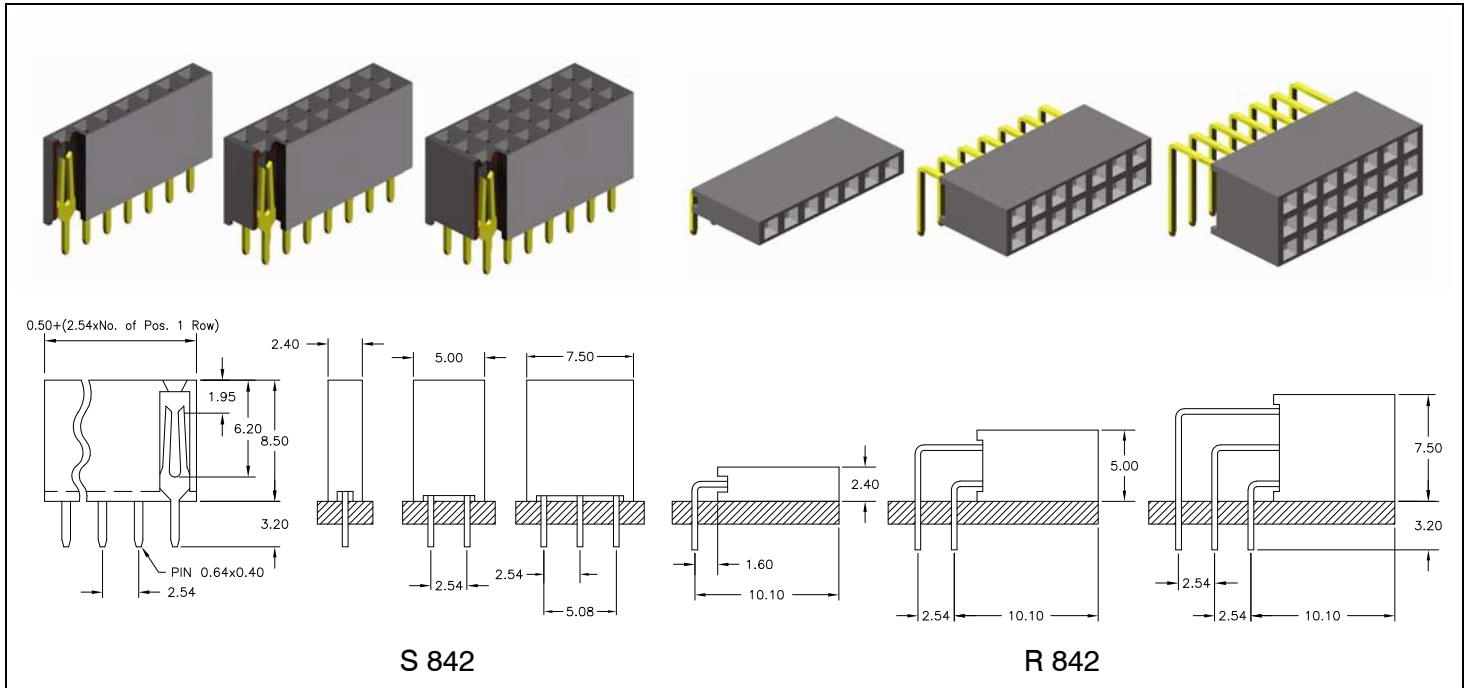
Nbr of pins
010; 014; 016
020; 024; 026
030; 034; 040
050; 060; 064

Style
<b>S</b> = straight
<b>R</b> = right angle

Plating
<b>55</b> = gold
Other platings on request

Latch style
<b>S</b> = short latch DIM "A" = 10.65 mm
<b>L</b> = long latch DIM "A" = 14.55 mm

2.54mm pitch Female Header  
 - THT - 8.50mm profile



**APPLICATION AND FEATURES**

Standard profile, 8.50mm height for straight connector style.

Hi-rel fork contacts

Accepts 0.64mm square pins

**SPECIFICATIONS**

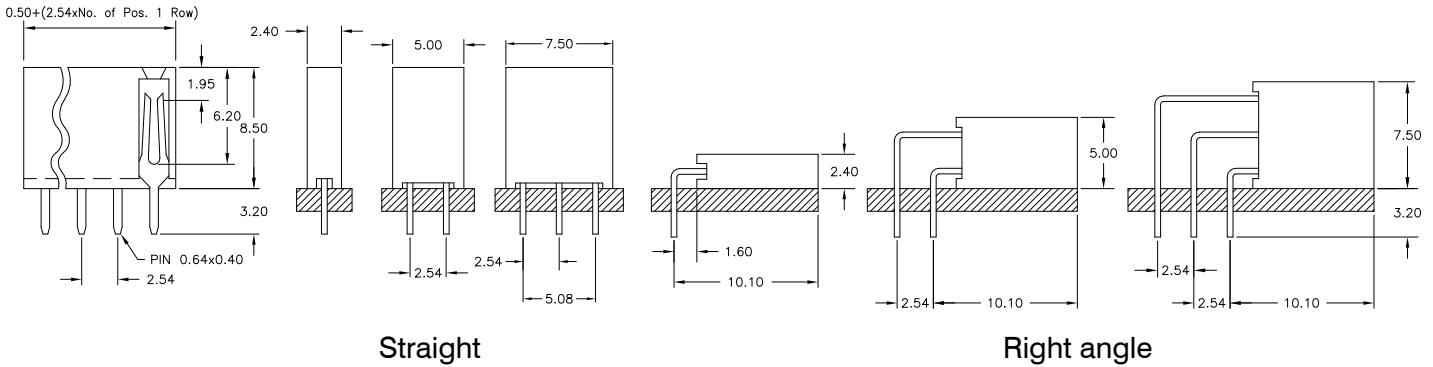
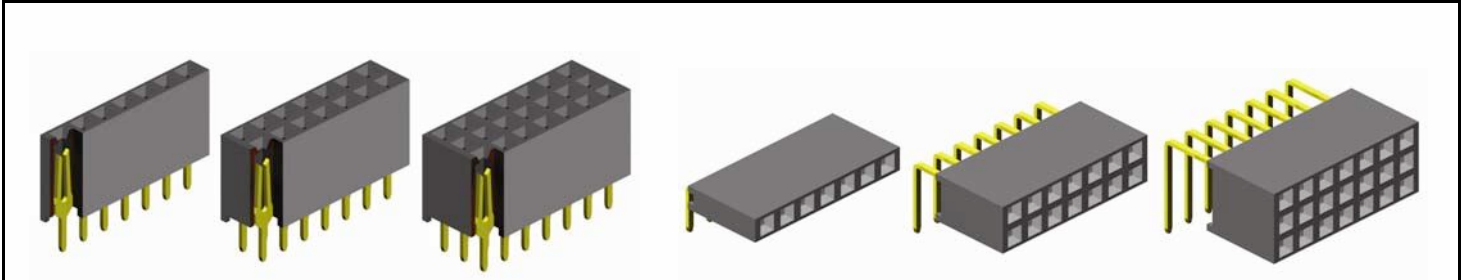
Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material (RoHS compliant)	Brass
Insulator material (RoHS compliant)	P.B.T. UL 94 V-0

How to order

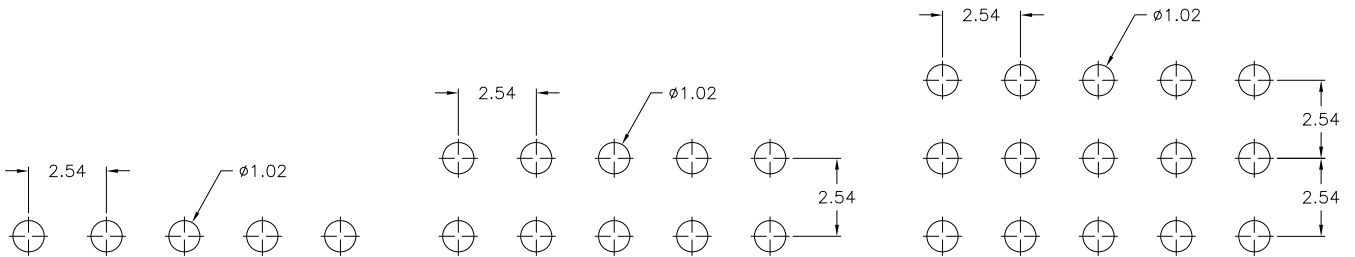
BL x - xxx - X 842 - 55

<b>Rows</b>	<b>Nbr of contacts</b>	<b>Connector style</b>	<b>Plating</b>
<b>1</b> = single row <b>2</b> = dual row <b>3</b> = triple row	single row = <b>002</b> to <b>040</b> dual row = <b>004</b> to <b>080</b> triple row = <b>009</b> to <b>120</b>	<b>S 842</b> = straight <b>R 842</b> = right angle  Dimensions see drawings above	<b>55</b> = gold  Other platings on request

2.54mm pitch Female Header  
 - THT - 8.50mm profile



**PCB Hole Layout**



**APPLICATION AND FEATURES**

Standard profile, 8.50mm height for straight connector style.

Hi-rel fork contacts

Accepts 0.64mm square pins

**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material <i>(RoHS compliant)</i>	Phosphor Bronze
Insulator material <i>(RoHS compliant)</i>	P.B.T. or Nylon UL 94 V-0

**How to order**

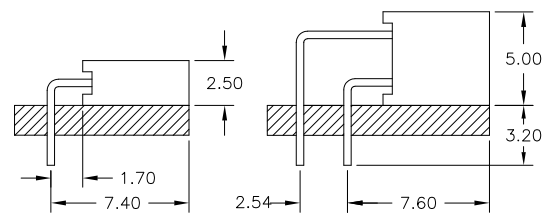
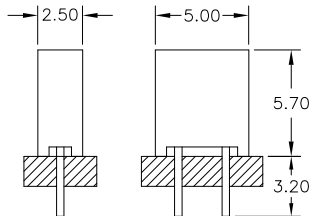
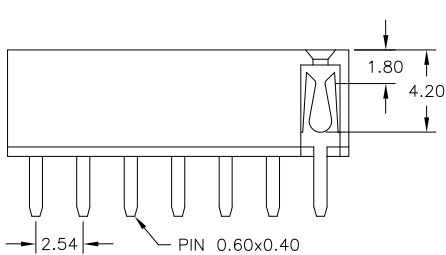
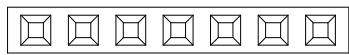
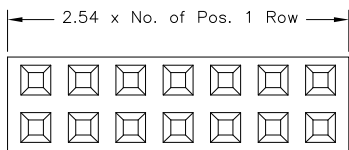
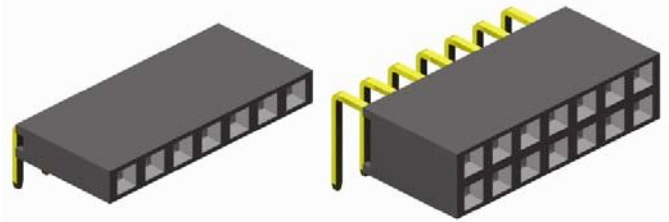
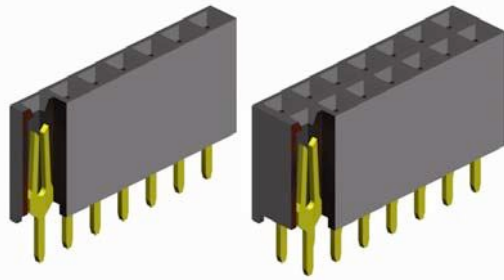
**BL x - xxx - X 842 - 55**

Rows	Nbr of contacts	Connector style	Plating
<b>1</b> = single row	single row = <b>002</b> to <b>040</b>	<b>S 842</b> = straight (P.B.T. Insulator)	<b>55</b> = gold
<b>2</b> = dual row	dual row = <b>004</b> to <b>080</b>	<b>SH 842</b> = straight (Nylon Insulator)	Other platings on request
<b>3</b> = triple row	triple row = <b>009</b> to <b>120</b>	<b>R 842</b> = right angle (P.B.T. Insulator)	
		<b>RH 842</b> = right angle (Nylon Insulator)	

Dimensions see drawings above



2.54mm pitch Female Header  
 - THT - 5.70mm profile



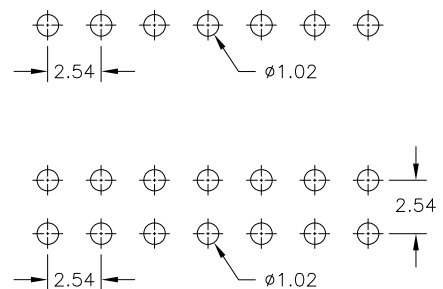
S 570

R 570

**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material	Brass (RoHS compliant)
Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)

**PCB Hole Layout**



**How to order**

**BL x - xxx - X 570 - 55**

Rows	
<b>1</b>	= single row
<b>2</b>	= dual row

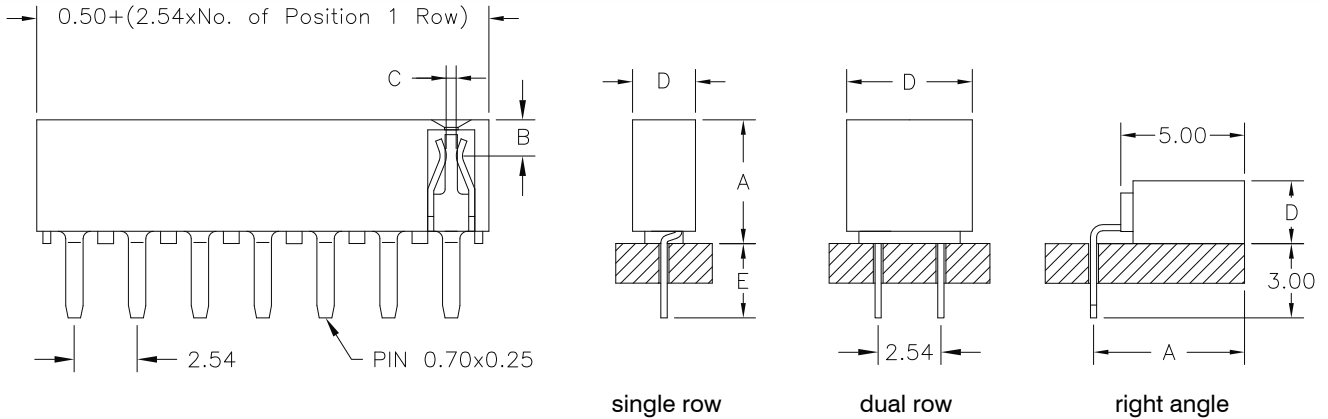
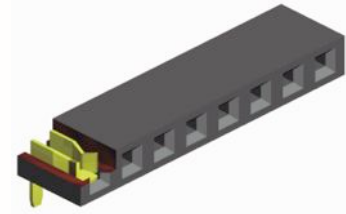
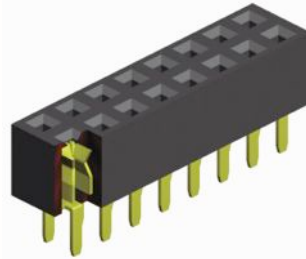
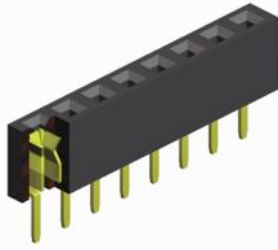
Nbr of contacts	
single row	= <b>002</b> to <b>040</b>
dual row	= <b>004</b> to <b>080</b>

Connector style	
<b>S 570</b>	= straight
<b>R 570</b>	= right angle

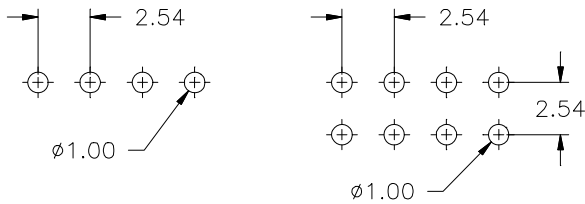
Plating	
<b>55</b>	= gold
Other platings on request	

# 2.54mm pitch Female Header

- THT - folded contacts



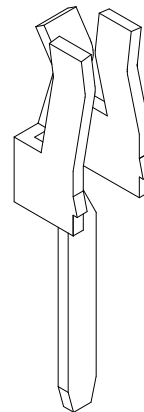
## PCB Hole Layout



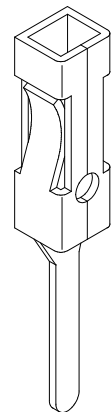
## SPECIFICATIONS

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Contact material	Phosphor Bronze
Insulator material	P.B.T. UL 94 V-0

*(RoHS compliant)*



Contact style 1

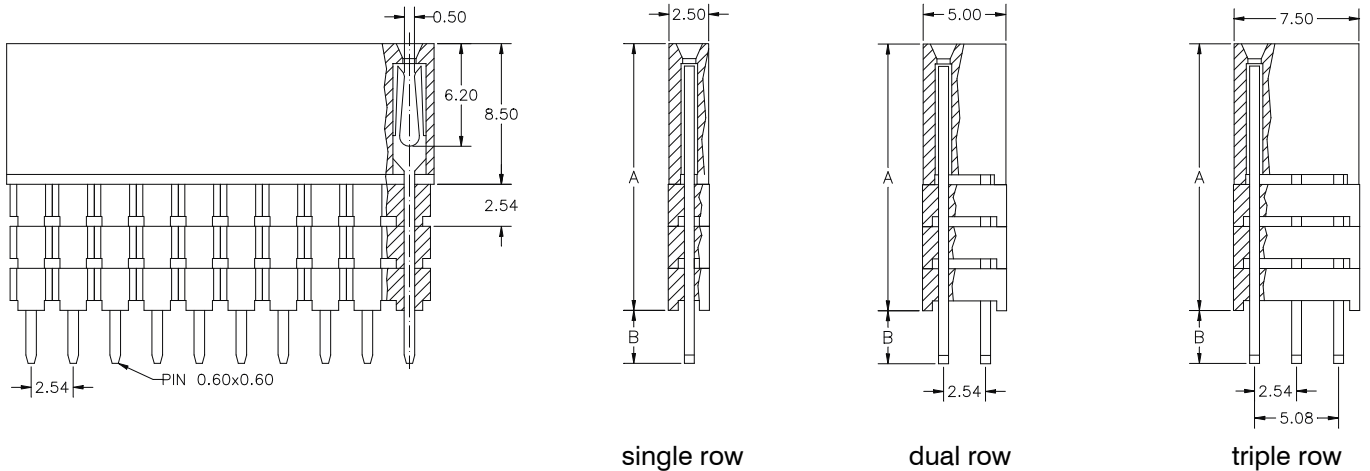
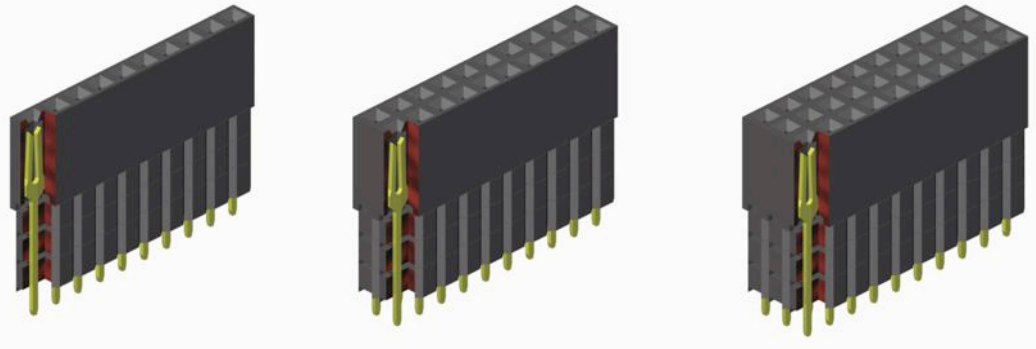


Contact style 2

## How to order

**BF x - xxx - X xxx - 55**

Rows	Nbr of contacts	Code	Connector style	Contact style	DIM "A" (mm)	DIM "B" (mm)	DIM "C" (mm)	DIM "D" (mm)	DIM "E" (mm)	Plating
<b>1</b> = 1 row	<b>002 to 040</b> (1 row)	<b>S 500</b>	straight	1	5.00	1.50	0.42	2.50 (1 row)	3.20	<b>55</b> = gold  Other platings on request
<b>2</b> = 2 rows	<b>004 to 080</b> (2 rows)									
<b>1</b> = 1 row	<b>002 to 040</b> (1 row)	<b>R 500</b>	R/A	1	6.10	1.50	0.42	2.50 (1 row)		
<b>1</b> = 1 row	<b>002 to 030</b> (1 row)	<b>S 680</b>	straight	2	6.80	3.50	0.50	3.50 (1 row)	3.50	
<b>2</b> = 2 rows	<b>004 to 060</b> (2 rows)									
<b>1</b> = 1 row	<b>002 to 040</b> (1 row)	<b>S 710</b>	straight	1	7.10	1.50	0.22	2.50 (1 row)	3.20	
<b>2</b> = 2 rows	<b>004 to 080</b> (2 rows)									
<b>1</b> = 1 row	<b>002 to 040</b> (1 row)	<b>S 850</b>	straight	1	8.50	1.50	0.22	3.00 (1 row)	3.20	
<b>2</b> = 2 rows	<b>004 to 080</b> (2 rows)									



single row

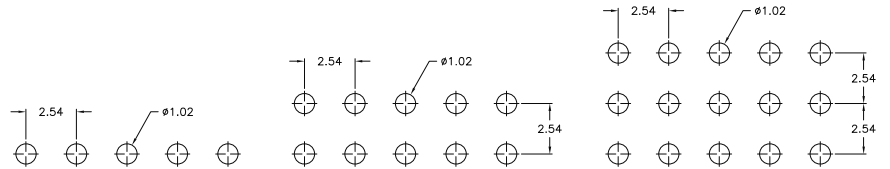
dual row

triple row

**APPLICATION AND FEATURES**

- Various heights for board-to-board connections
- Ideal solution for PC/104-Plus Systems
- Accepts 0.64mm square pins
- Hi-rel fork contact design

**PCB Hole Layout**



**SPECIFICATIONS**

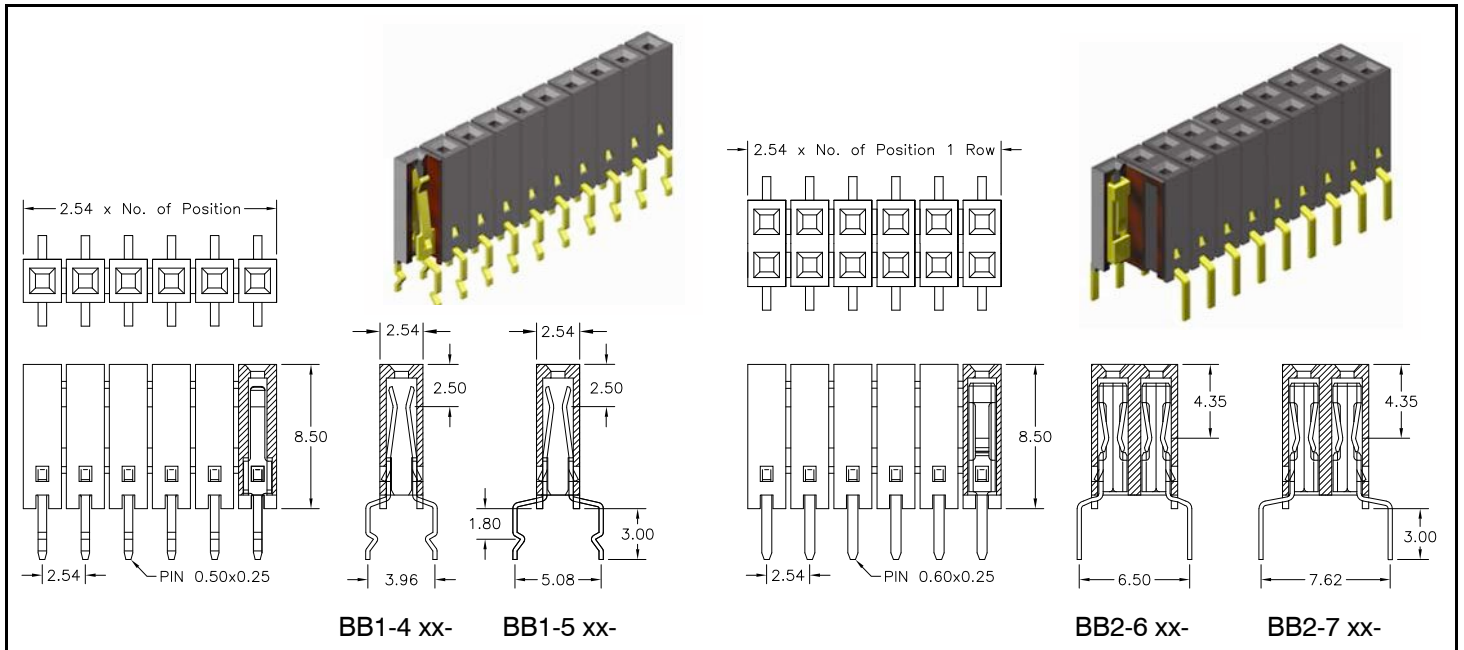
Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	Phosphor Bronze
Contact resistance	20 mΩ max.	Insulator material	P.B.T. UL 94 V-0
Withstanding voltage	500 V AC		

How to order

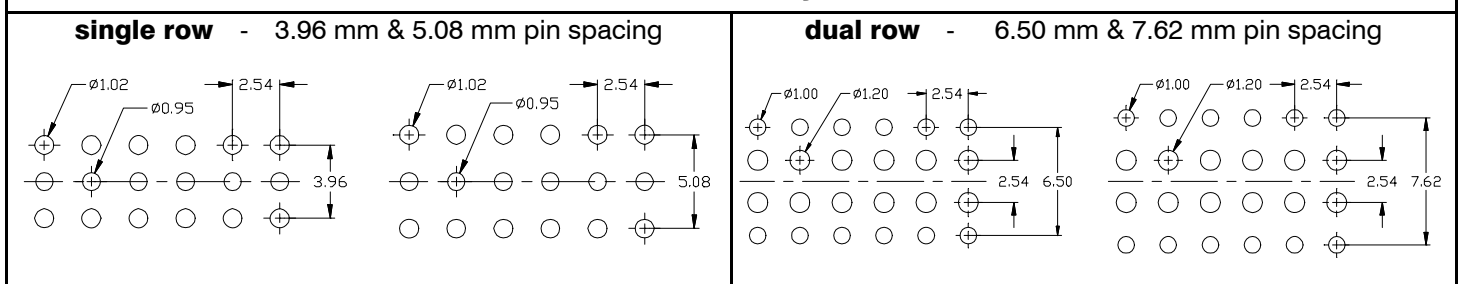
BE x - xxx - S xxx - 55

<p><b>Rows</b></p> <p>1 = single row</p> <p>2 = dual row</p> <p>3 = triple row</p>	<p><b>Nbr of contacts</b></p> <p>single row = <b>002</b> to <b>040</b></p> <p>dual row = <b>004</b> to <b>080</b></p> <p>triple row = <b>006</b> to <b>120</b></p>	<table border="1"> <thead> <tr> <th>Version</th> <th>DIM "A" (mm / inch)</th> <th>DIM "B" (mm / inch)</th> </tr> </thead> <tbody> <tr><td>111</td><td>11.05 / .435</td><td>2.30 / .091</td></tr> <tr><td>112</td><td>11.05 / .435</td><td>7.35 / .289</td></tr> <tr><td>113</td><td>11.05 / .435</td><td>12.20 / .480</td></tr> <tr><td>131</td><td>13.59 / .535</td><td>4.85 / .191</td></tr> <tr><td>132</td><td>13.59 / .535</td><td>9.65 / .380</td></tr> <tr><td>161</td><td>16.13 / .635</td><td>2.30 / .091</td></tr> <tr><td>162</td><td>16.13 / .635</td><td>7.10 / .280</td></tr> <tr><td>181</td><td>18.67 / .735</td><td>4.60 / .181</td></tr> </tbody> </table> <p>Other dimensions on request</p>	Version	DIM "A" (mm / inch)	DIM "B" (mm / inch)	111	11.05 / .435	2.30 / .091	112	11.05 / .435	7.35 / .289	113	11.05 / .435	12.20 / .480	131	13.59 / .535	4.85 / .191	132	13.59 / .535	9.65 / .380	161	16.13 / .635	2.30 / .091	162	16.13 / .635	7.10 / .280	181	18.67 / .735	4.60 / .181	<p><b>Plating</b></p> <p>55 = gold</p> <p>Other platings on request</p>
Version	DIM "A" (mm / inch)	DIM "B" (mm / inch)																												
111	11.05 / .435	2.30 / .091																												
112	11.05 / .435	7.35 / .289																												
113	11.05 / .435	12.20 / .480																												
131	13.59 / .535	4.85 / .191																												
132	13.59 / .535	9.65 / .380																												
161	16.13 / .635	2.30 / .091																												
162	16.13 / .635	7.10 / .280																												
181	18.67 / .735	4.60 / .181																												

2.54mm pitch Female Header  
 - THT - dual entry type 8.50mm profile



**PCB Hole Layout**



**APPLICATION AND FEATURES**

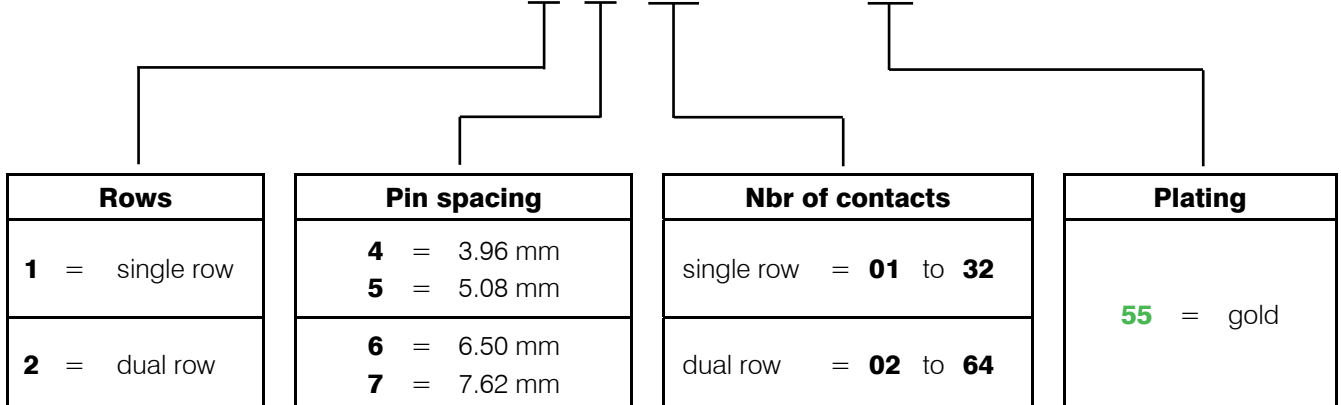
- Hi-rel dual beam contact assures reliable PCB connections
- Dual entry design for board stacking
- Accepts 0.64mm square pins
- Stand-off's facilitate post solder cleaning

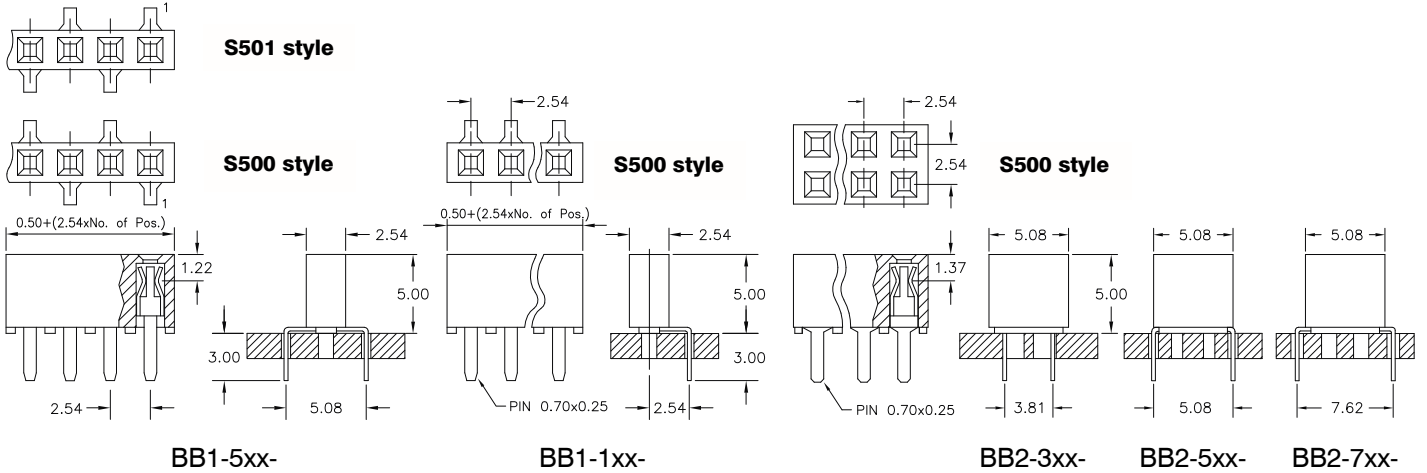
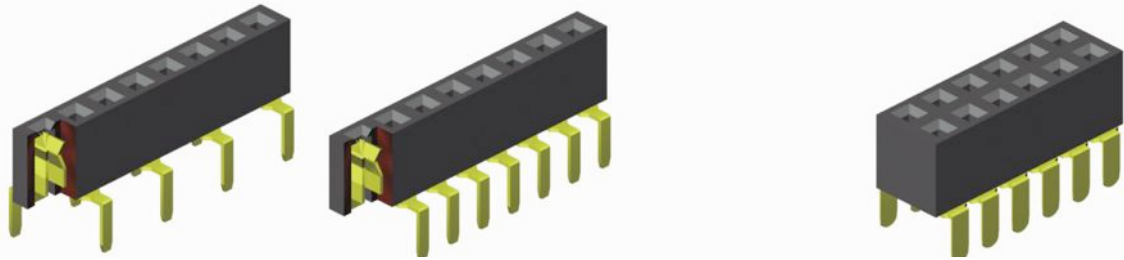
**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material (RoHS compliant)	Phosphor Bronze
Insulator material (RoHS compliant)	LCP UL 94 V-0

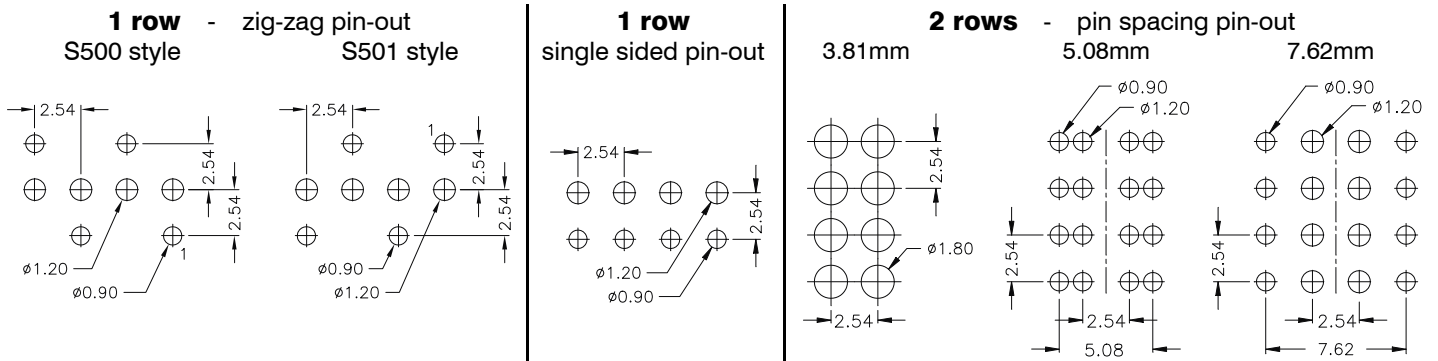
**How to order**

BB x - x    xx - B850 - 55





**PCB Hole Layout**



**APPLICATION AND FEATURES**

- Hi-rel dual beam contact assures reliable PCB connections
- Dual entry design for board stacking
- Accepts 0.64mm square pins
- Stand-off's facilitate post solder cleaning

**SPECIFICATIONS**

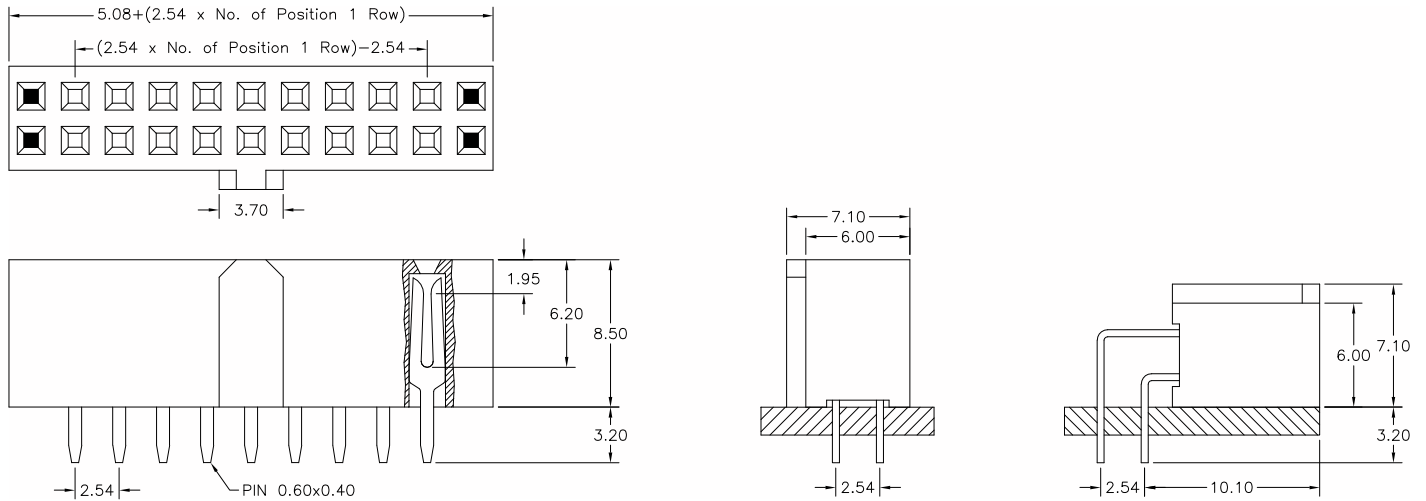
Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material (RoHS compliant)	Phosphor Bronze
Insulator material (RoHS compliant)	P.B.T. UL 94 V-0

**How to order**

**BB x - x xx - S xxx - 55**

<b>Rows</b>	<b>Pin spacing</b>	<b>Nbr of contacts</b>	<b>Foot Style</b>	<b>Plating</b>
<b>1</b> = single row	<b>1</b> = single side only <b>5</b> = 5.08mm zig-zag	<i>single row</i> <b>02</b> to <b>40</b>	<i>single row</i> <b>500 &amp; 501</b> Pls. choose <b>500</b> style if odd pin count.	<b>55</b> = gold
<b>2</b> = dual row	<b>3</b> = 3.81 mm <b>5</b> = 5.08 mm <b>7</b> = 7.62 mm	<i>dual row</i> <b>04</b> to <b>80</b>	<i>dual row</i> <b>500</b>	

2.54mm pitch Female Header  
 - THT - for "Box Header" mating



**APPLICATION AND FEATURES**

Mating with box (shrouded) header 2.54mm pitch

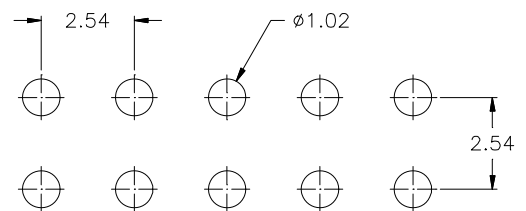
SLS-xxx-S920-xx, SLS-xxx-R920-xx, SLS-xxx-Dxxx-xx & SLS-xxx-H885-xx/X

Standard with polarization bump.

**SPECIFICATIONS**

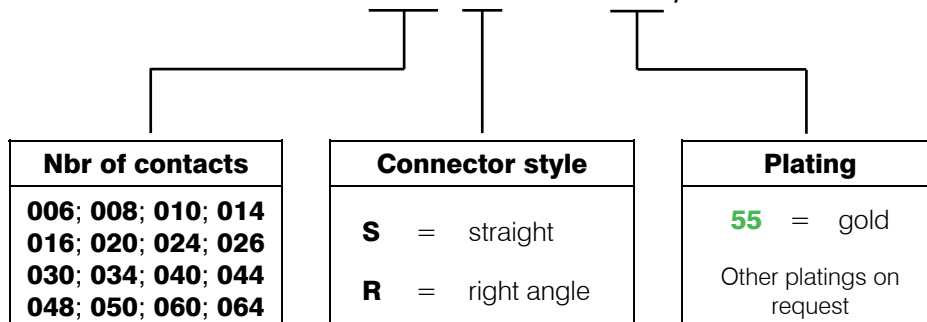
Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to + 105°C
Contact material	Brass
Insulator Material	P.B.T. UL 94 V-0

**PCB Hole Layout**



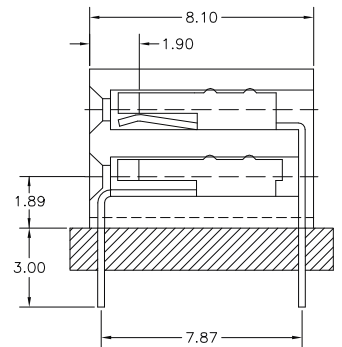
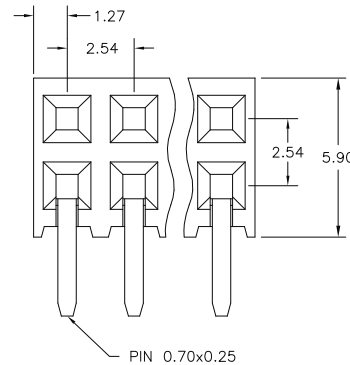
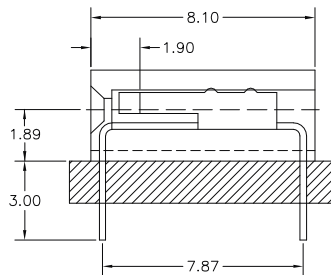
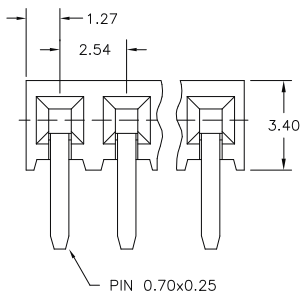
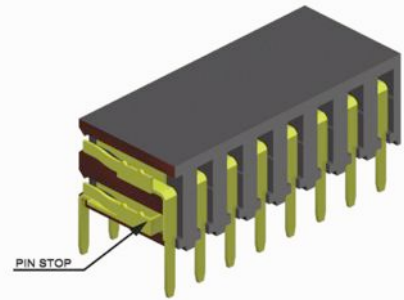
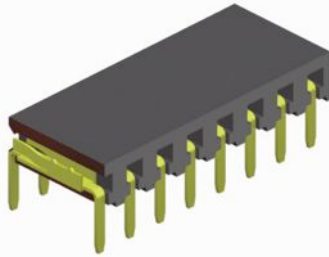
**How to order**

**BW 2 - xxx - X 850 - 55 / P**



2.54mm pitch Female Header

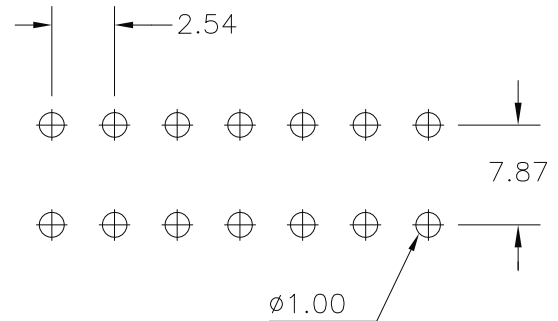
- THT - side entry type



**APPLICATION AND FEATURES**

- Hi-rel dual beam contact assures reliable PC-board connections
- Accepts 0.64mm square pins
- Stand-off's facilitate post solder cleaning
- 3.40mm and 5.90mm height above board

**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to + 105°C
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) P.B.T. UL 94 V-0

How to order

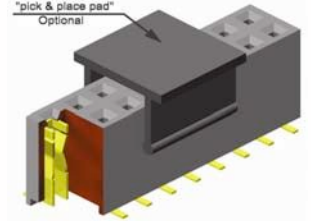
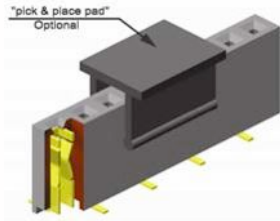
BH x - xxx - R850 - 55

Rows	
<b>1</b>	= single row
<b>2</b>	= dual row

Nbr of contacts	
single row	= <b>003</b> to <b>040</b>
dual row	= <b>004</b> to <b>080</b>

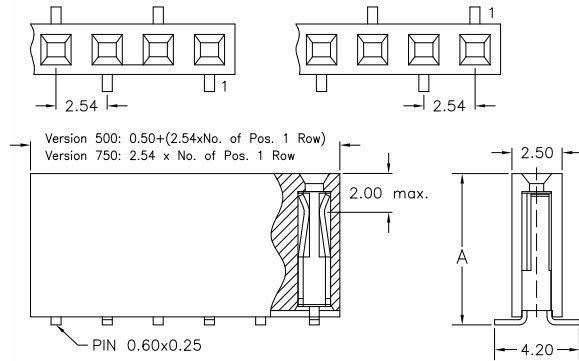
Plating	
<b>55</b>	= gold
Other platings on request	

# 2.54mm pitch Female Header - SMT - Top & Bottom Entry 7.50mm & 5.00mm profile

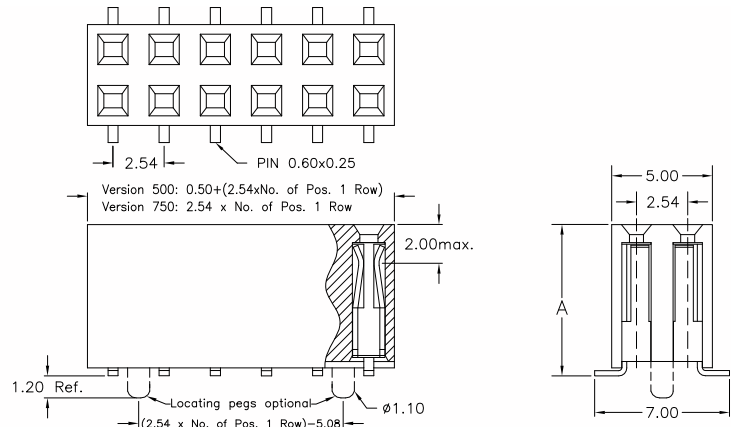


## Version and Foot style

### 500 & 750



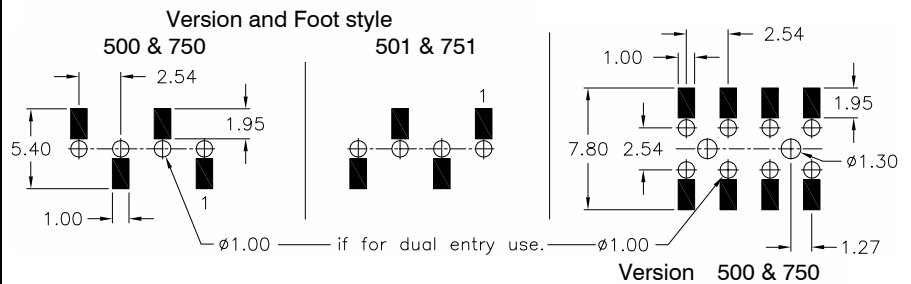
### Version 500 & 750



## APPLICATION AND FEATURES

- **Standard: tube packing and without "pick & place pad"**
- 5.00mm & 7.50mm height above board. Hi-rel dual beam contacts.
- Mating with 2.54mm pitch, 0.64mm sq. or round pin headers.

## PCB Surface Mount & Hole Layout



## SPECIFICATIONS

Current rating	3 A	Operating temperature	-40° C to +105° C
Insulator resistance	1000 MΩ min.	Processing temperature	+250° C ±0/-5° C for 10sec.
Contact resistance	20 mΩ max.	Contact material	Phosphor Bronze
Withstanding voltage	500 V AC	Insulator material	Nylon UL 94 V-0

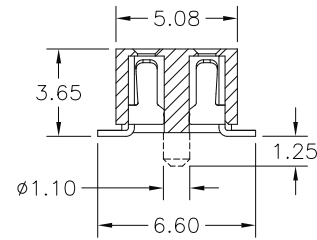
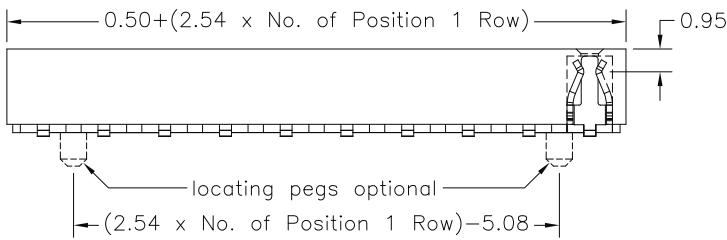
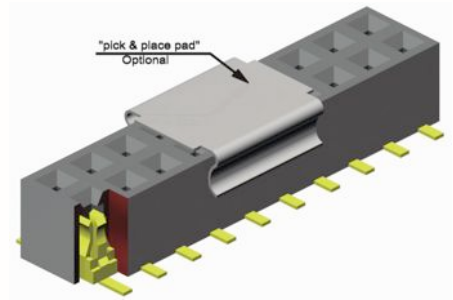
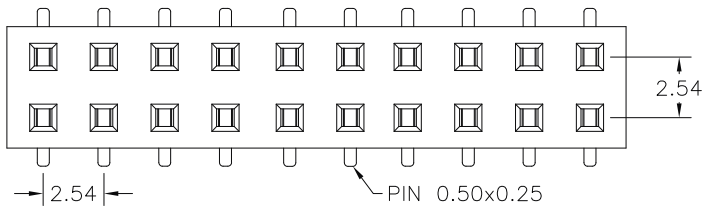
## How to order

BS x - xxx - H xxx - 55 / X

Rows	Nbr of contacts	Version & Foot style	Plating	Packing and "pick & place pad" Option
1 single row	002 to 040	<b>500</b> DIM "A" = 5.00 mm <b>501</b> (optional foot layout) <b>750</b> DIM "A" = 7.50 mm <b>751</b> (optional foot layout) Pls. choose <b>500</b> or <b>750</b> style if odd pin count	55 = gold	<b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad
2 dual row	004 to 080	<b>500</b> DIM "A" = 5.00 mm <b>750</b> DIM "A" = 7.50 mm	Other platings on request	<b>without "locating pegs"</b> <b>A</b> = tube packing; with pick & place pad <b>B</b> = reel packing; with pick & place pad <b>with "locating pegs"</b> <b>C</b> = tube packing; without pick & place pad <b>D</b> = tube packing; with pick & place pad <b>E</b> = reel packing; with pick & place pad



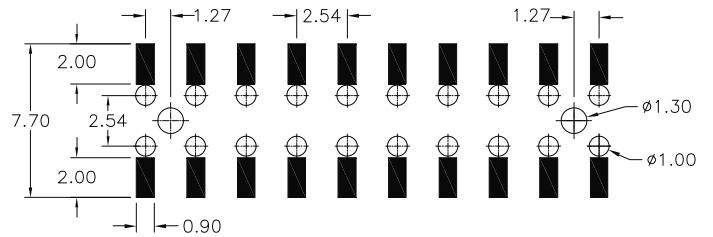
2.54mm pitch Female Header - SMT -  
Top & Bottom Entry 3.65mm profile



**APPLICATION AND FEATURES**

- **Standard:**  
**tube packing and without "pick & place pad"**
- 3.65mm height above board.
- Hi-rel dual beam contacts
- Designed for board to board small spacing interconnection
- Mating with 2.54mm pitch, 0.64mm square pin headers

**PCB Surface Mount & Hole Layout**



**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material	(RoHS compliant) Phosphor Bronze
Insulator material	(RoHS compliant) Nylon UL 94 V-0

**How to order**

BS2 - xxx - TB 365 - 55 / X

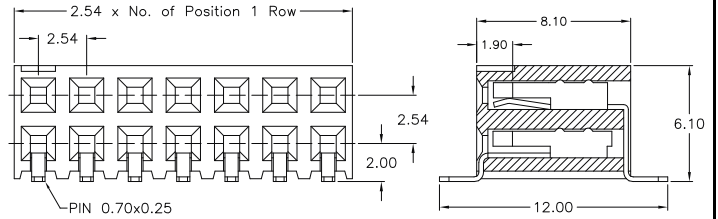
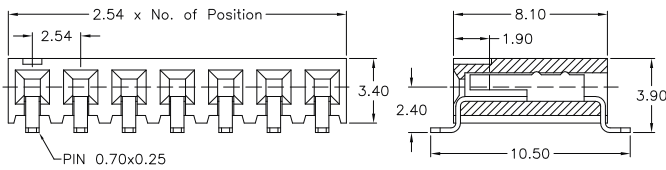
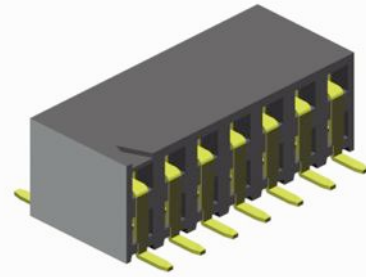
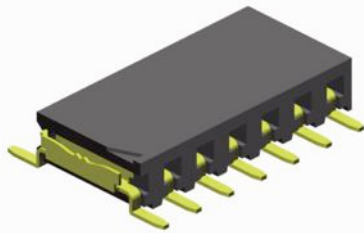
Nbr of contacts
004 to 080

Plating
55 = gold
Other platings on request

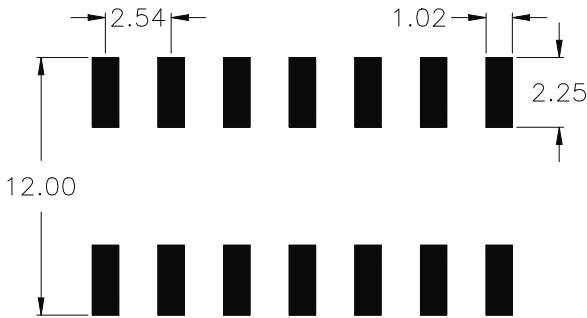
Packing and "pick & place pad" Option
<b>without "locating pegs"</b>
<b>A</b> = tube packing; with pick & place pad
<b>B</b> = reel packing; with pick & place pad
<b>with "locating pegs"</b> (available only from 006 to 080 contacts)
<b>C</b> = tube packing; without pick & place pad
<b>D</b> = tube packing; with pick & place pad
<b>E</b> = reel packing; with pick & place pad

When using this female connector as a bottom entry connector, we recommend that the pinheader pins protrude by around 2.00mm above the surface of the female connector after assembly. This will avoid any risk of separation of the pinheader from the female header during shock and vibration.

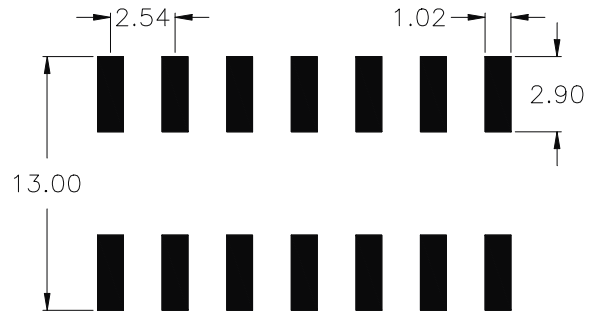
2.54mm pitch Female Header  
 - SMT - side entry single & dual row



**PCB Surface Mount Layout -single row-**



**PCB Surface Mount Layout -dual row-**



**APPLICATION AND FEATURES**

- **Standard: tube packing**
- Hi-rel dual beam contact assures reliable PC-board connections
- Accepts 0.64mm square pins
- Stand-off's facilitate post solder cleaning
- Lowest possible profile
- Automatic assembly to PCB possible

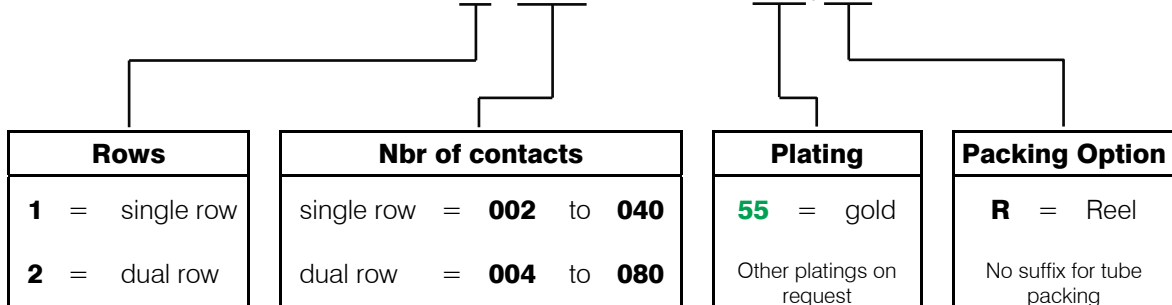
**SPECIFICATIONS**

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Processing temperature	+250°C +0/-5°C for 10sec.
Contact material (RoHS compliant)	Phosphor Bronze
Insulator material (RoHS compliant)	Nylon UL 94 V-0

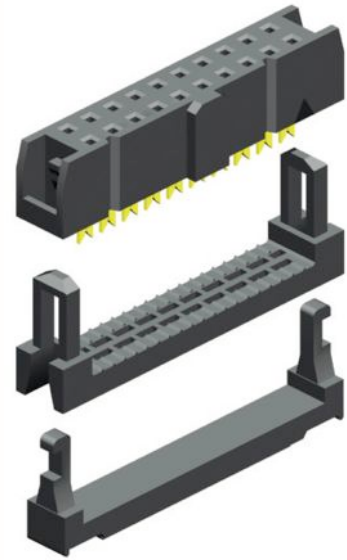
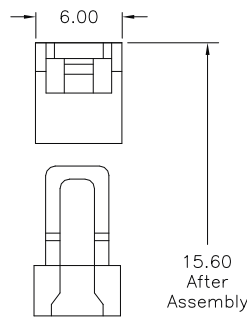
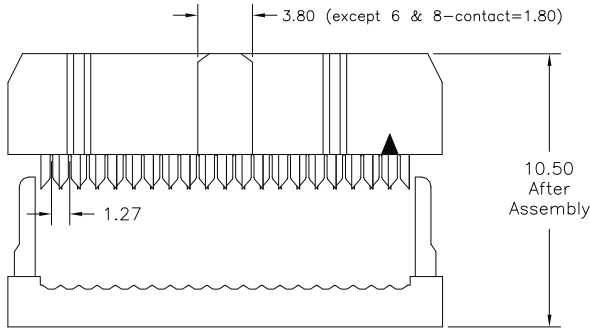
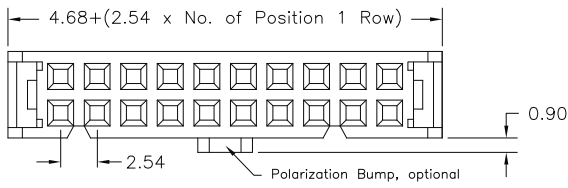
**How to order**

BS x - xxx - R390 - 55 / X



2.54mm pitch

IDC – Female Connector



**SPECIFICATIONS**

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material (RoHS compliant)	Brass
Contact resistance	30 mΩ max.	Plating	Nickel; Gold on mating area
Withstanding voltage	500 V AC	Insulator material (RoHS compliant)	P.B.T. black UL 94 V-0 (grey colour on request)

**APPLICATION AND FEATURES**

Designed to mate with 0.64mm square pins box (shrouded) header

High Quality contacts

Accepts 1.27mm pitch flat ribbon cable AWG 28 (0.20mm) or AWG 30 (0.17mm).

How to order

IDS - xxx - X 100 - N5 ( / P )

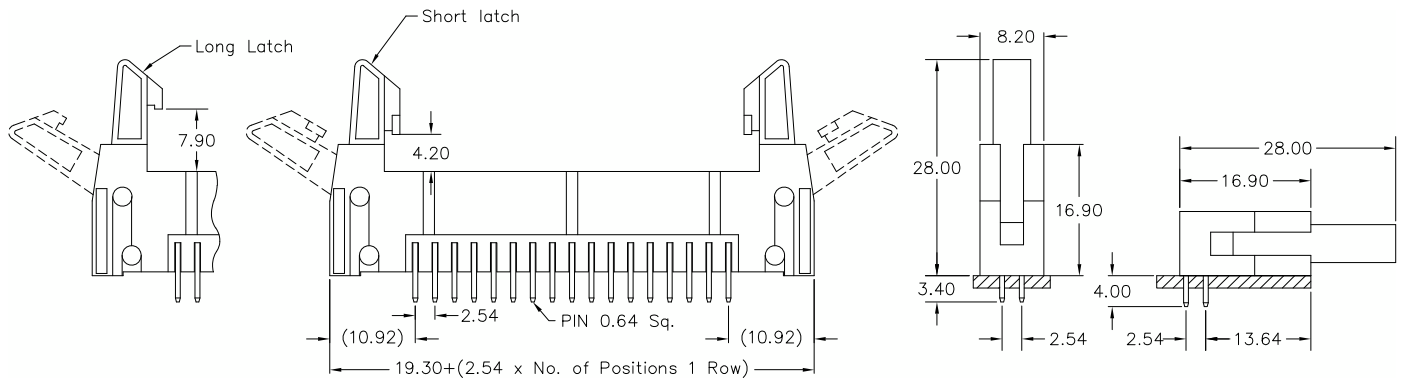
Nbr of contacts
006; 008; 010; 012
014; 016; 018; 020
024; 026; 030; 034
036; 040; 050; 060
064

Strain relief
<b>S</b> = With
<b>W</b> = Without

Option
<b>P</b>
if Polarization bump is requested

2.54mm pitch

DIN Header (DIN 41651)



### APPLICATION AND FEATURES

Provides fast connection / disconnection of IDC connectors.

Assures reliable flat cable to PC - board assembly.

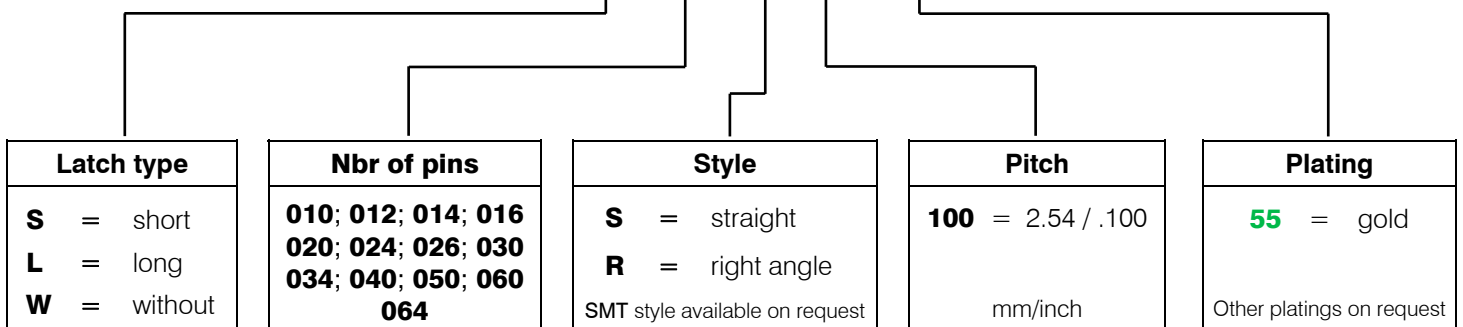
Optional latching features available.

### SPECIFICATIONS

Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material <i>(RoHS compliant)</i>	Brass
Withstanding voltage	500 V AC	Insulator material <i>(RoHS compliant)</i>	P.B.T. UL 94 V-0 black colour

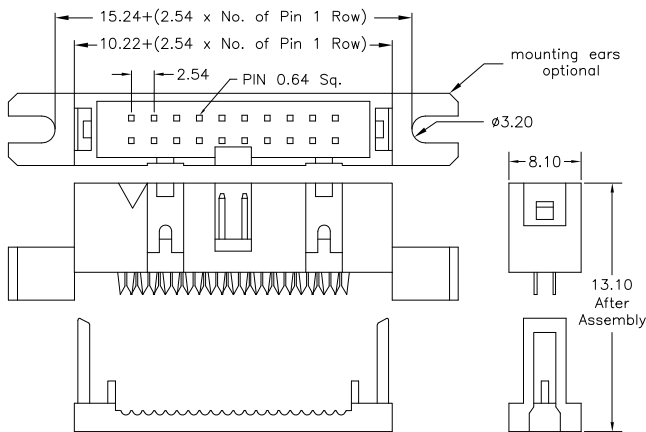
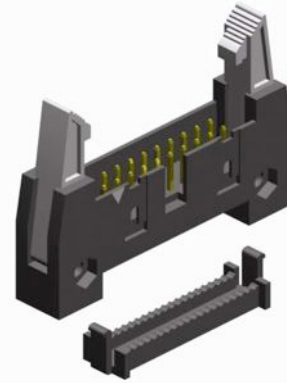
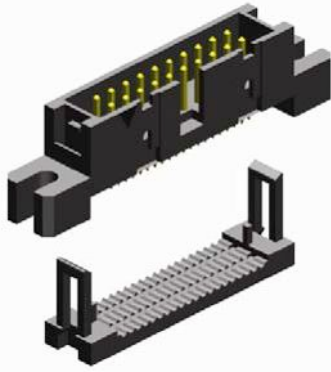
### How to order

**DH X - xxx - X 100 - 55**

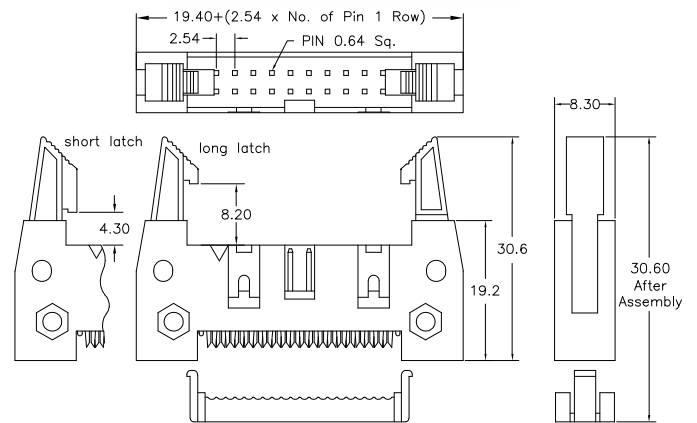


2.54mm pitch

IDC Shrouded Header



IDH Type



IDD Type

**SPECIFICATIONS**

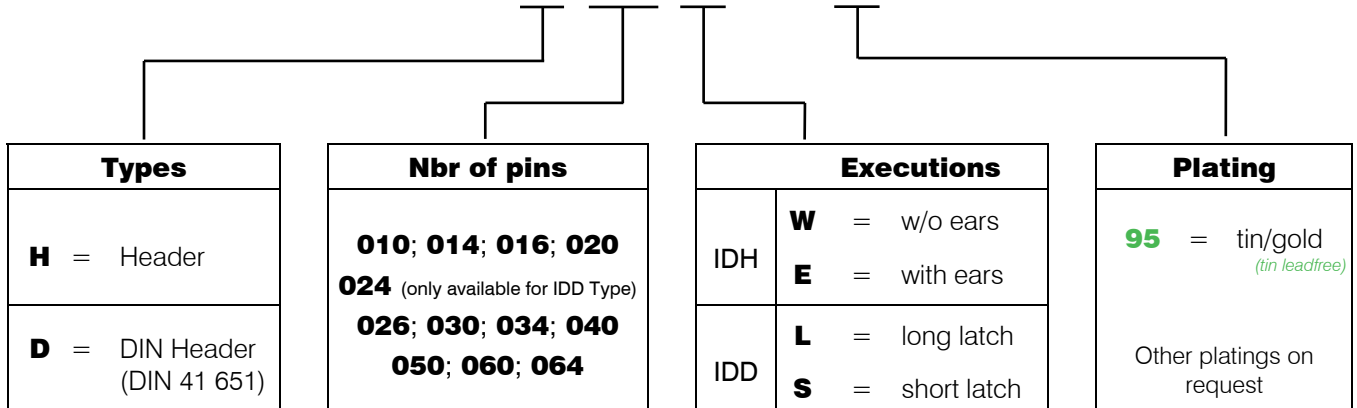
Current rating	3 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	(RoHS compliant) Phosphor bronze
Withstanding voltage	500 V AC	Insulator material	(RoHS compliant) P.B.T. gray UL 94 V-0

**APPLICATION AND FEATURES**

Designed to mate with 2.54mm IDC female headers.  
 Header type is available with or without mounting ears.  
 DIN Header type is available with long & short eject latches.  
 Standard Insulator colour gray, other colours on request

How to order

**ID X - xxx - X 100 - 95**



# Mini – Jumpers

1.27mm, 2.00mm, 2.54mm & 5.08mm



1.27mm & 2.00mm		Mini - Jumpers	
<p><b>JPC – type - top closed -</b></p> <p>Order Code: <b>JPC – 127 – BL – 55</b></p>	<p><b>JPE – type - top open -</b></p> <p>Order Code: <b>JPE – 200 – BL – 55</b> Other colours: <b>RD, BU, YL</b></p>	<p><b>JPC – type - top closed -</b></p> <p>Order Code: <b>JPC – 200 – BL – 55</b></p>	<p><b>JPH – type - with handle -</b></p> <p>Order Code: <b>JPH – 200 – BL – 55</b> Other colours: <b>RD, BU, YL &amp; WH</b></p>

2.54mm & 5.08mm		Mini - Jumpers	
<p><b>JPE – type top open - commercial type -</b></p> <p>Order Code: <b>JPE – 254 – BL – 55</b> Other colours: <b>GR, RD, BU, YL &amp; WH</b></p>	<p><b>JPC – type top closed</b></p> <p>Order Code: <b>JPC – 254 – BL – 55</b> Other colours: <b>GR, RD, BU, YL &amp; WH</b></p>	<p><b>JPH – type with handle</b></p> <p>Order Code: <b>JPH – 254 – BL – 55</b> Other colours: <b>GR, RD, BU, YL &amp; WH</b></p>	<p><b>JPC – type top closed</b></p> <p>Order Code: <b>JPC – 508 – BL – 55</b></p>

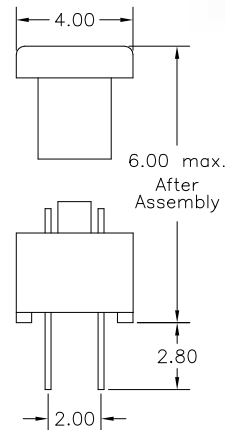
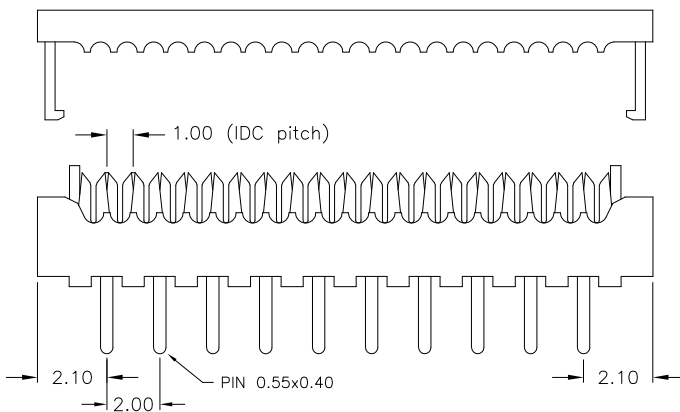
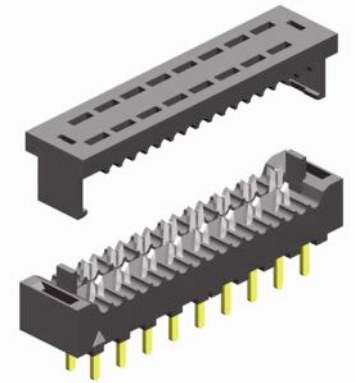
2.00mm Multi - Jumper	2.54mm Multi - Jumper
<p>Order Code: <b>JPM – xx – 200 – BL – 55</b> No. of Jumper : <b>02 to 11</b></p>	<p>Order Code: <b>JPM – xx – 254 – BL – 55</b> No. of Jumper : <b>02 to 10</b></p>

Non Insulated Wire Shorting Links			
<p><b>JPW – type 254</b></p> <p>Order Code: <b>JPW – 254 – 55</b></p>	<p><b>JPW – type 508</b></p> <p>Order Code: <b>JPW – 508 – 55</b></p>	<p><b>JPW – type 762</b></p> <p>Order Code: <b>JPW – 762 – 55</b></p>	<p><b>JPW – type 102</b></p> <p>Order Code: <b>JPW – 102 – 55</b></p>

Specifications	
<p>Max. current rating</p> <p>1.27 &amp; 2.00mm pitch : 1 A</p> <p>2.54 &amp; 5.08mm pitch : 3 A</p> <p>Insulator resistance 1000 MΩ min.</p> <p>Contact resistance 20 mΩ max.</p> <p>Withstanding voltage 500 V AC</p> <p>Operating temperature - 40°C to +105°C</p>	<p>Contact material <b>JPC, JPE, JPH &amp; JPM:</b> Phosphor Bronze <b>JPW:</b> Brass; Ø 0.51 +0.25/-0.00</p> <p>Plating Jumper &amp; Wire Shorting Links Au plated</p> <p>Insulator material P.B.T. UL 94 V-0 (RoHS compliant)</p> <p>Colour attributes <b>BL</b> = black for Jumpers <i>Standard</i> <b>RD</b> = red <b>BU</b> = blue <b>GR</b> = green <b>WH</b> = white <b>YL</b> = yellow <i>Other colours on request</i></p>

IDC – DIP Plug 2.00mm x 2.00mm

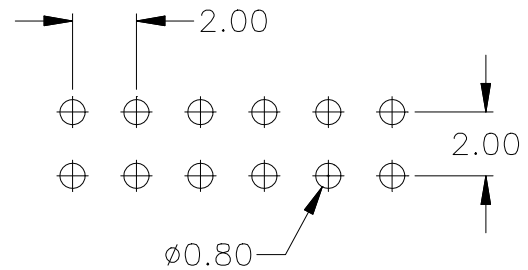
IDC pitch 1.00mm



### APPLICATION AND FEATURES

- A perfect solution for attaching a 1.00mm pitch flat ribbon cable to a PC-board
- Low-profile, only 6.00mm above board
- Designed for plug into socket or direct soldering to a PC-board

### PCB Hole Layout



### SPECIFICATIONS

Current rating	1 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC

Operating temperature	- 40°C to +105°C
Contact material (RoHS compliant)	Phosphor Bronze
Insulator material (RoHS compliant)	P.B.T. UL 94 V-0

### How to order

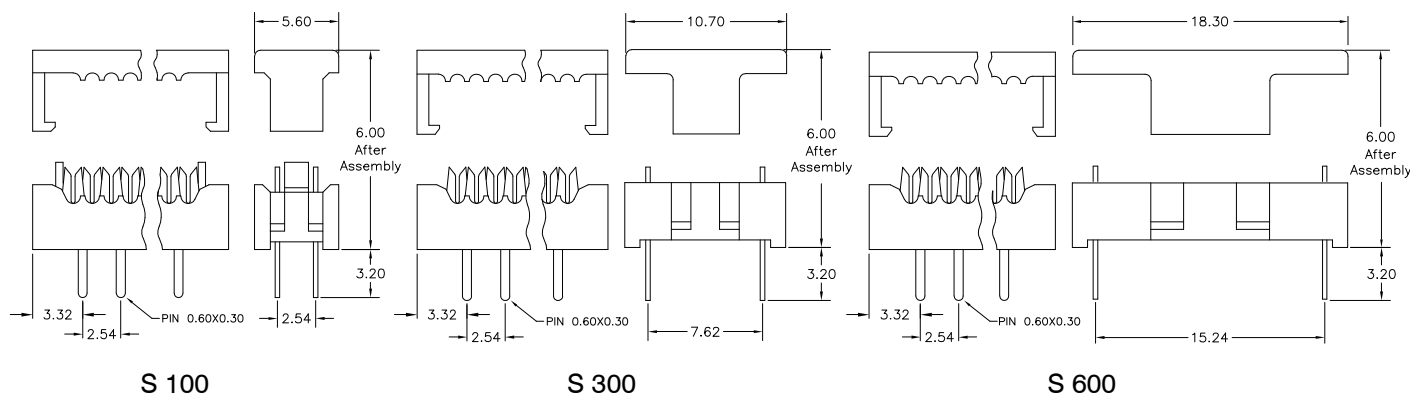
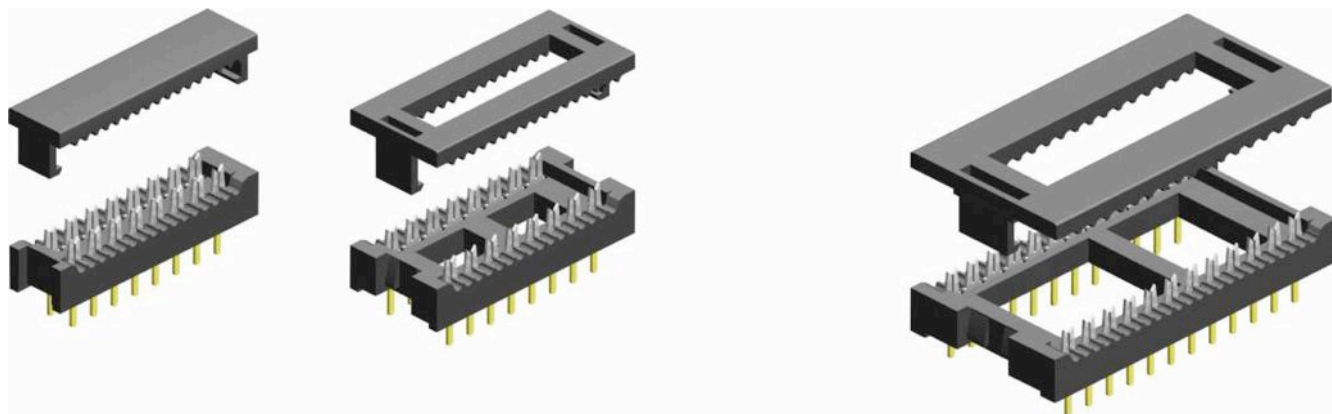
IDP - xxx - S 200 - N5

Nbr of contacts
006; 008; 010; 012; 014 016; 020; 022; 024; 026 030; 034; 040; 044; 050 060; 068

Plating
N5
Ni on IDC area / Au on solder tail

IDC – DIP Plugs 2.54mm

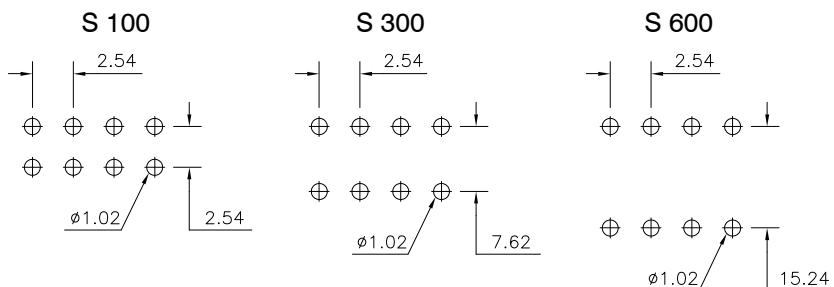
IDC pitch 1.27mm



**APPLICATION AND FEATURES**

- A perfect solution for attaching a 1.27mm flat ribbon cable to a PC-board
- Low-profile, only 6.00mm above board
- Designed for direct soldering to a PC-board

**PCB Hole Layout**



**SPECIFICATIONS**

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	30 mΩ max.	Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)
Withstanding voltage	500 V AC		

How to order

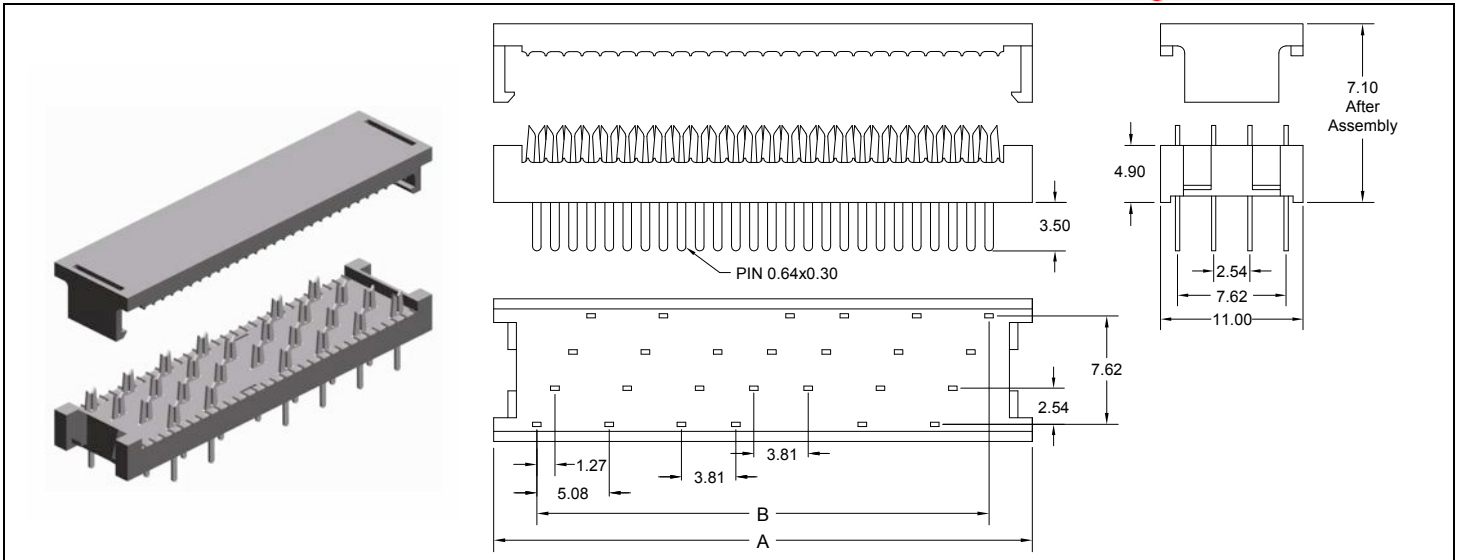
IDP - xxx - S xxx - N5

Nbr of contacts			DIP Plug style		Plating
S 100 Style	S 300 Style	S 600 Style	Code	Pitch (mm/inch)	
006; 008; 010; 012 014; 016; 020; 024 026; 030; 034; 040 050; 060; 064	008; 010; 014 016; 018; 020 024; 026; 028 034; 040	010; 014; 016 018; 020; 024 026; 028; 032 034; 036; 040	S 100	2.54 / .100	N5  Ni on IDC area/Au on solder tail
			S 300	7.62 / .300	
			S 600	15.24 / .600	



# IDC Transition Connector - THT -

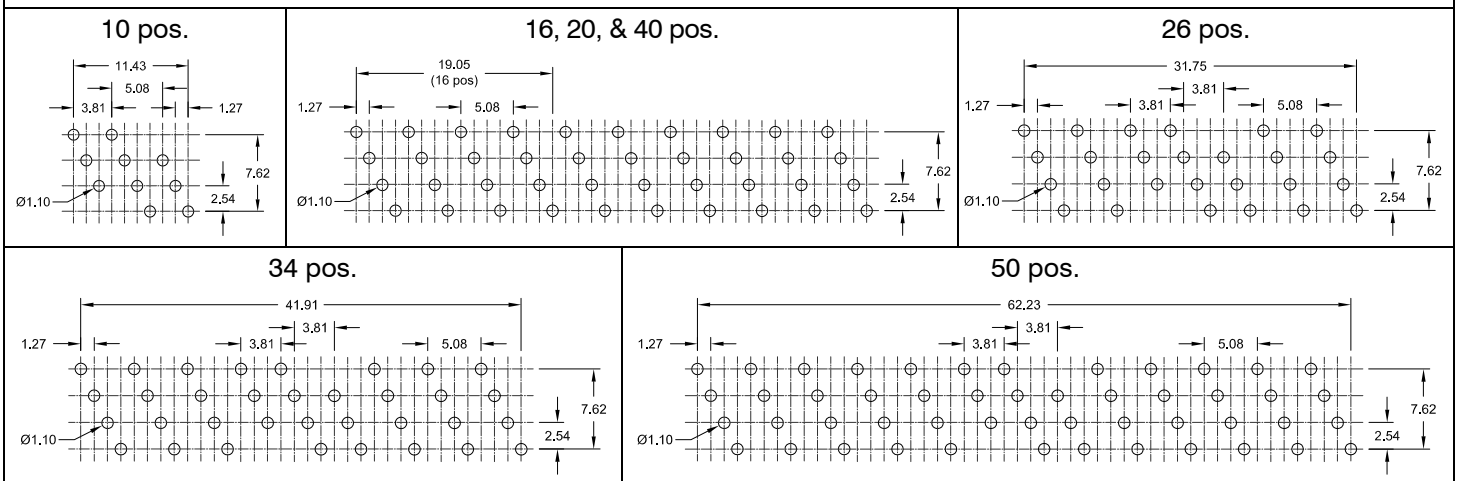
IDC pitch 1.27mm



## DIMENSIONS (mm/inch)

DIM	10 pos.	16 pos.	20 pos.	26 pos.	34 pos.	40 pos.	50 pos.
A	18.17 / .715	25.79 / 1.015	30.87 / 1.215	38.49 / 1.515	48.65 / 1.915	56.27 / 2.215	68.97 / 2.715
B	11.43 / .450	19.05 / .750	24.13 / .950	31.75 / 1.250	41.91 / 1.650	49.53 / 1.950	62.23 / 2.450

## PCB HOLE LAYOUTS



## APPLICATION AND FEATURES

Designed for 1.27mm (.050") centre flat ribbon cable.  
 Low profile with only 5.80mm above board after assembly.  
 Designed for direct soldering to PCB.

## SPECIFICATIONS

Current rating	1 A	Operating temperature	- 40°C to +105°C
Insulator resistance	1000 MΩ min.	Contact material (RoHS compliant)	Phosphor Bronze
Contact resistance	30 mΩ max.	Insulator material (RoHS compliant)	P.B.T. UL 94 V-0
Withstanding voltage	500 V AC		

How to order  
**IDP - xxx - T050 - 99**

Nbr of contacts
<b>010; 016; 020; 026</b>
<b>034; 040; 050</b>

Plating
<b>99</b> = tin (leadfree)
Other platings on request

# PCI Card Edge Connector - THT - 1.27mm pitch



**120 pin**

Top view dimensions: 84.84 (total length), 1.27 (pitch), 14.99 (offset), 63.25 (main length), 8.89 (height).

Side view dimensions: 1.78 (width), 15.49 (height), 3.00 (thickness), 64.77 (length), 1.98x2.40 (hole pattern).

Cross-section dimensions: 0.60±0.20 (width), 1.88 (height), 7.62 (width), 7.62 (height), 2.54 (width).

PCB Hole Layout dimensions: 1.27 (pitch), 3.81 typ. (hole spacing), ø1.02±0.08 (hole diameter), 2.54 (offset), 64.77±0.08 (length), ø2.44±0.05 (hole diameter), Pin 1.

PCI 32bit      Order Code: **ECC - 120 - P050 - 95**

**184 pin**

Top view dimensions: 128.02 (total length), 1.27 (pitch), 14.99 (offset), 63.25 (main length), 41.81 (end length), 8.89 (height).

Side view dimensions: 1.78 (width), 1.37 (width), 15.49 (height), 3.00 (thickness), 64.77 (length), 1.98x2.40 (hole pattern), 43.18 (end length).

Cross-section dimensions: 0.60±0.20 (width), 1.88 (height), 7.62 (width), 7.62 (height), 2.54 (width).

PCB Hole Layout dimensions: 1.27 (pitch), 3.81 typ. (hole spacing), ø1.02±0.08 (hole diameter), 2.54 (offset), 64.77±0.08 (length), 43.18±0.08 (end length), ø2.44±0.05 (hole diameter), Pin 1.

PCI 64bit 3.3V      Order Code: **ECC - 184 - P053 - 95**

**184 pin**

Top view dimensions: 128.02 (total length), 1.27 (pitch), 63.25 (main length), 14.99 (offset), 41.81 (end length), 8.89 (height).

Side view dimensions: 1.78 (width), 1.37 (width), 15.49 (height), 3.00 (thickness), 64.77 (length), 59.69 (main length), 1.98x2.40 (hole pattern).

Cross-section dimensions: 0.60±0.20 (width), 1.88 (height), 7.62 (width), 7.62 (height), 2.54 (width).

PCB Hole Layout dimensions: Pin 1, ø1.02±0.08 (hole diameter), 3.81 typ. (hole spacing), 1.27 (pitch), 2.54 (offset), 64.77±0.08 (length), 59.69±0.08 (main length), 3.81 typ. (hole spacing), ø2.44±0.05 (hole diameter).

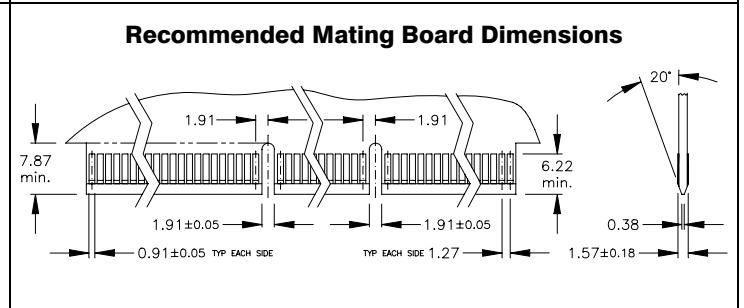
PCI 64bit 5V      Order Code: **ECC - 184 - P055 - 95**

### APPLICATION AND FEATURES

1.27mm contact centre pitch.

Hi-rel dual beam contact assures reliable PC Board connections.

Accepts PCB thickness of 1.57mm ±0.18

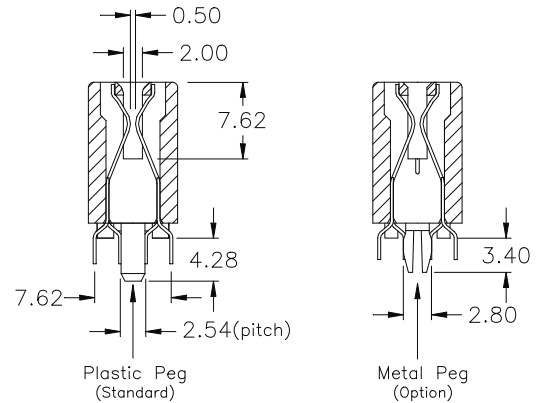
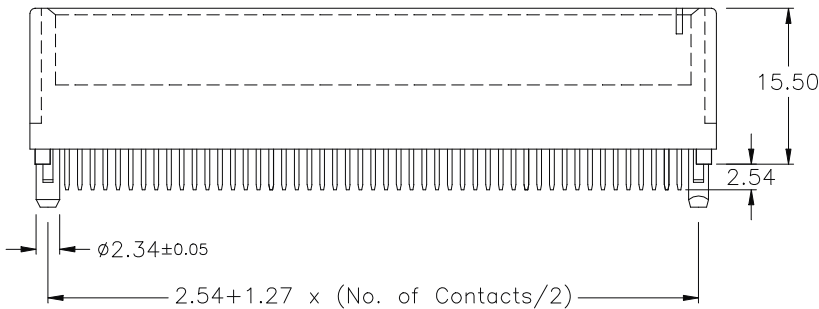
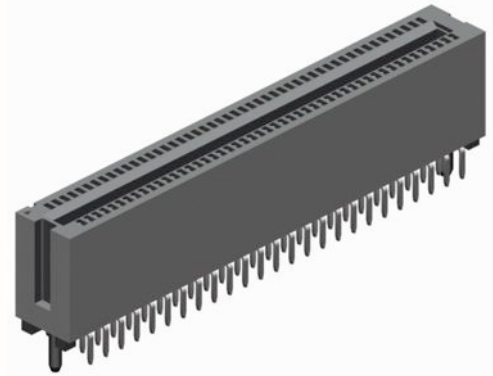
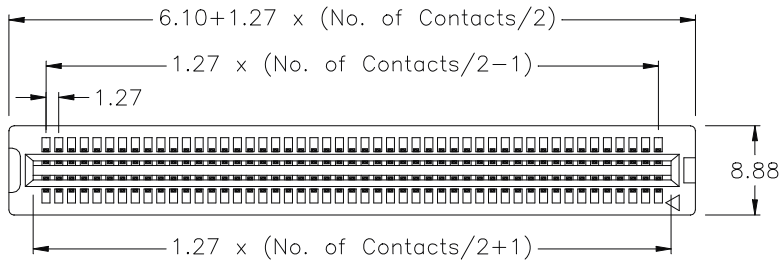


### SPECIFICATIONS

Current rating	1 A	Contact material	Copper alloy (RoHS compliant)
Insulation resistance	1000 MΩ min.	Plating	Contact area – Au over Ni
Contact resistance	30 mΩ max.		Soldertail area – Sn over Ni
Withstanding voltage	500 V AC rms. 60Hz for 1 Minute	Insulator material (white colour)	Nylon 66 UL 94 V-0 (RoHS compliant)
Capacitance	2pF max.	Contact retention	460g min. per contact
Voltage	250 V AC rms.	Insertion force	230g max. per contact pair
Operating temperature	- 55°C to +85°C	Withdrawal force	15g min. per contact pair
Solder temperature	260°C +/-5°C for 10Sec.		

# Card Edge Connector - THT -

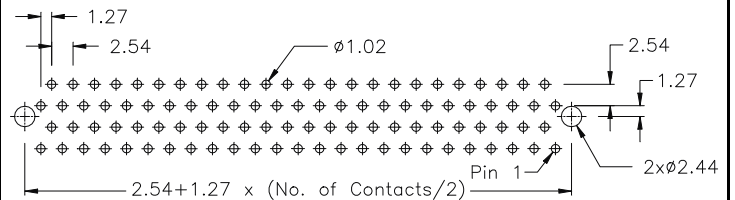
1.27mm pitch



## APPLICATION AND FEATURES

Hi-rel dual beam contact assures reliable PC Board connections.  
 Accepts PCB thickness of  $1.57\text{mm} \pm 0.18$   
 1.27mm contact centre pitch.

## PCB Hole Layout



## SPECIFICATIONS

Current rating	1 A
Insulation resistance	1000 MΩ min.
Contact resistance	30 mΩ max.
Withstanding voltage	500 V AC
Capacitance	2pF max.
Voltage	250 V

Operating temperature	-55°C to +85°C
Contact material	Copper alloy (RoHS compliant)
Plating	Contact area - Au over Ni Solder tail area - Sn over Ni (tin leadfree)
Insulator material (black colour)	Nylon 66 UL 94 V-0 (RoHS compliant)
Insertion force	230g max. per contact pair
Retention force	460g min. per contact pair

## How to order

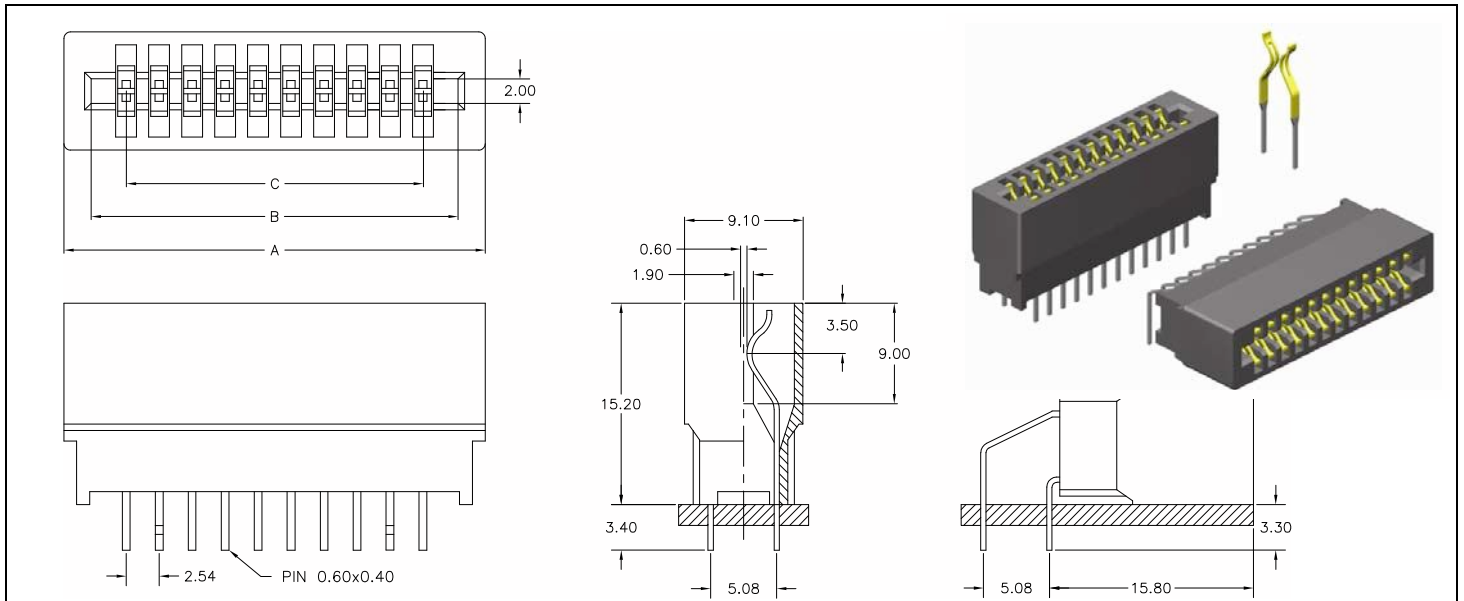
ECC - xxx - S050 - 95/ X

Nbr of contacts
<b>004; 006; 008; 010; 012; 014; 016; 018; 020</b>
<b>022; 024; 026; 028; 030; 032; 034; 036; 038</b>
<b>040; 042; 044; 046; 048; 050; 052; 054; 056</b>
<b>058; 060; 068; 080; 100; 120; 124; 128</b>
Other contacts on request

Plating
<b>95</b> = tin/gold (tin leadfree)
Other platings on request

Peg Option
<b>N</b> = metal peg
plastic peg is standard; no Option suffix

# Card Edge Connector - THT - 2.54mm pitch "X" Contact Style



## APPLICATION AND FEATURES

Hi-rel dual beam contact assures reliable PC-board connection.  
Accepts PC Board thickness of 1.37mm to 1.78mm.  
26, 36, 60, 62 and 120 contact type will be delivered with some kinked legs

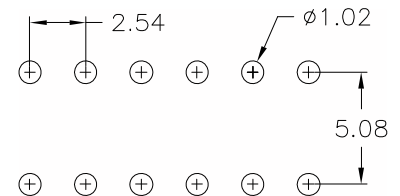
**Connectors with mounting ears or solder eyes are also available.**

**Please contact your nearest sales office for more details.**

## "X" Contact Style



## PCB Hole Layout



### Important:

The PCB Layout is not identical for all pincount's  
Individual datasheets are available on request.

## SPECIFICATIONS

Current rating 3 A  
Insulator resistance 1000 MΩ min.  
Contact resistance 20 mΩ max.  
Withstanding voltage 500 V AC

Operating temperature -40°C to +105°C  
Contact material (RoHS compliant) Brass  
Insulator material (RoHS compliant) P.B.T. UL 94 V-0  
Insertion force 340g max. / pair  
Withdrawal force 28g min. / pair

## DIMENSIONS (mm)

Style	No. of Contacts	DIM "A"	DIM "B"	DIM "C"	Style	No. of Contacts	DIM "A"	DIM "B"	DIM "C"	Style	No. of Contacts	DIM "A"	DIM "B"	DIM "C"
S & R	006	14.22	10.16	5.08	S & R	034	49.78	45.72	40.64	S & R	062	85.34	81.28	76.20
S & R	008	16.76	12.70	7.62	S & R	036	52.32	48.26	43.18	S & R	064	87.88	83.82	78.74
S & R	010	19.30	15.24	10.16	S & R	038	54.86	50.80	45.72	S & R	068	92.96	88.90	83.82
S & R	012	21.84	17.78	12.70	S & R	040	57.40	53.34	48.26	S & R	070	95.50	91.44	86.36
S & R	014	24.38	20.32	15.24	S & R	042	59.94	55.88	50.80	S & R	072	98.04	93.98	88.90
S & R	016	26.92	22.86	17.78	S & R	044	62.48	58.42	53.34	S & R	080	108.20	104.14	99.06
S & R	018	29.46	25.40	20.32	S & R	046	65.02	60.96	55.88	S & R	086	115.82	111.76	106.68
S & R	020	32.00	27.94	22.86	S & R	048	67.56	63.50	58.42	S & R	092	123.44	119.38	114.30
S & R	022	34.54	30.48	25.40	S & R	050	70.10	66.04	60.96	S & R	098	131.06	127.00	121.92
S & R	024	37.08	33.02	27.94	S & R	052	72.64	68.58	63.50	S & R	100	133.60	129.54	124.46
S & R	026	39.62	35.56	30.48	S & R	054	75.18	71.12	66.04	S & R	104	138.68	134.62	129.54
S & R	028	42.16	38.10	33.02	S & R	056	77.72	73.66	68.58	S	110	146.30	142.24	137.16
S & R	030	44.70	40.64	35.56	S & R	058	80.26	76.20	71.12	S	120	159.00	154.94	149.86
S & R	032	47.24	43.18	38.10	S & R	060	82.80	78.74	73.66					

## How to order

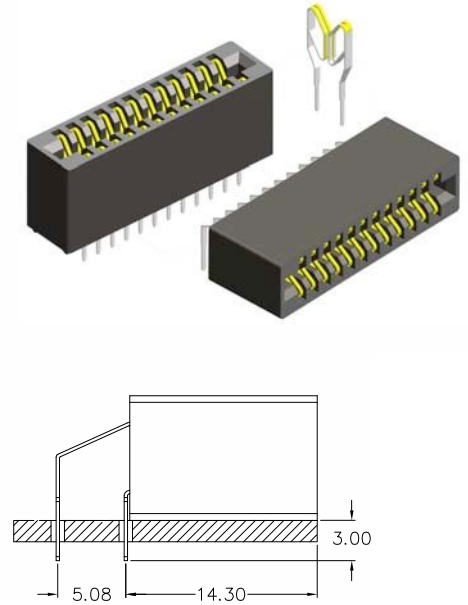
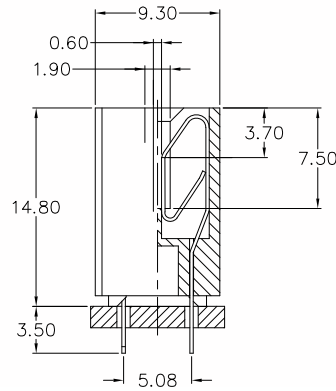
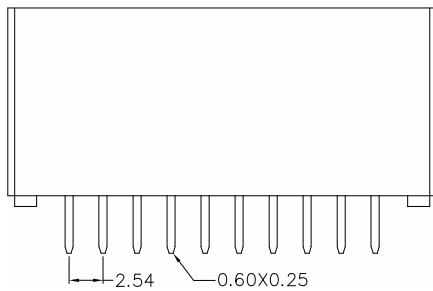
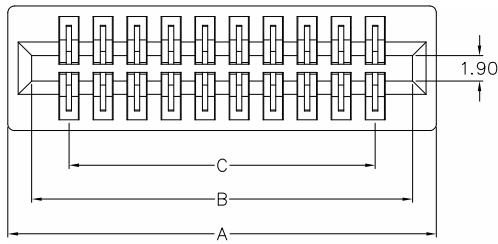
ECC - xxx - X100 - 95

**Nbr of contacts**  
see above table

**Connector style**  
S 100 = straight  
R 100 = right angle  
**Attention high MOQ's**  
Refer to Connector style SC100 and RC100 on page 89a for a close equivalent

**Plating**  
95 = tin/gold  
(tin leadfree)  
Other platings on request

# Card Edge Connector - THT - 2.54mm pitch "M" Contact Style



## APPLICATION AND FEATURES

Hi-rel dual beam contact assures reliable PC-board connection.  
Accepts PC Board thickness of 1.00mm to 1.60mm.

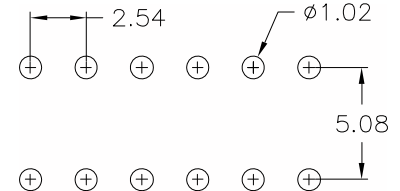
**Connectors with mounting ears or solder eyes are also available.**

**Please contact your nearest sales office for more details.**

## "M" Contact Style



## PCB Hole Layout



### Important:

The PCB Layout is not identical for all pincount's  
Individual datasheets are available on request.

## SPECIFICATIONS

Current rating 3 A  
Insulator resistance 1000 MΩ min.  
Contact resistance 20 mΩ max.  
Withstanding voltage 1000 V AC

Operating temperature -55°C to +85°C  
Contact material (RoHS compliant) Brass  
Insulator material (RoHS compliant) P.B.T. UL 94 V-0  
Insertion force 340g max. / pair  
Withdrawal force 28g min. / pair

## DIMENSIONS (mm)

Style	No. of Contacts	DIM "A"	DIM "B"	DIM "C"	Style	No. of Contacts	DIM "A"	DIM "B"	DIM "C"	Style	No. of Contacts	DIM "A"	DIM "B"	DIM "C"
S & R	006	14.22	10.66	5.08	S & R	034	49.78	46.22	40.64	S & R	062	85.34	81.78	76.20
S & R	008	16.76	13.20	7.62	S & R	036	52.32	48.76	43.18	S & R	064	87.88	84.32	78.74
S & R	010	19.30	15.74	10.16	S & R	038	54.86	51.30	45.72	S & R	066	90.42	86.86	81.28
S & R	012	21.84	18.28	12.70	S & R	040	57.40	53.84	48.26	S & R	068	92.96	89.40	83.82
S & R	014	24.38	20.82	15.24	S & R	042	59.94	56.38	50.80	S & R	070	95.50	91.94	86.36
S & R	016	26.92	23.36	17.78	S & R	044	62.48	58.92	53.34	S & R	072	98.04	94.48	88.90
S & R	018	29.46	25.90	20.32	S & R	046	65.02	61.46	55.88	S & R	080	108.20	104.64	99.06
S & R	020	32.00	28.44	22.86	S & R	048	67.56	64.00	58.42	S & R	086	115.82	111.76	106.68
S & R	022	34.54	30.98	25.40	S & R	050	70.10	66.54	60.96	S & R	100	133.60	130.04	124.46
S & R	024	37.08	33.52	27.94	S & R	052	72.64	69.08	63.50	S & R	120	159.00	155.44	149.86
S & R	026	39.62	36.06	30.48	S & R	054	75.18	71.62	66.04					
S & R	028	42.16	38.60	33.02	S & R	056	77.72	74.16	68.58					
S & R	030	44.70	41.14	35.56	S & R	058	80.26	76.70	71.12					
S & R	032	47.24	43.68	38.10	S & R	060	82.80	79.24	73.66					

## How to order

ECC - xxx - XC100 - 95

### Nbr of contacts

see above table

### Connector style

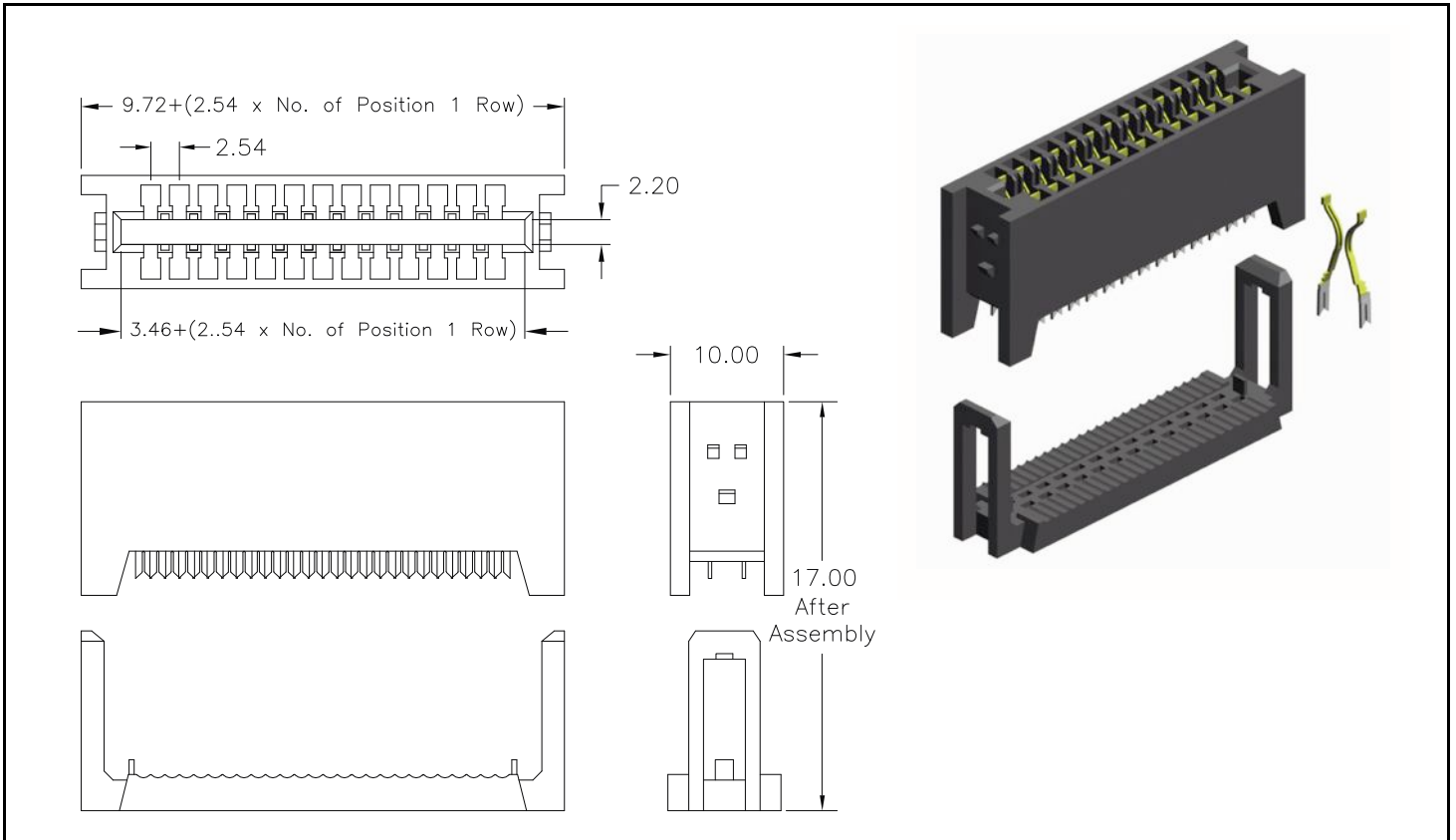
SC 100 = straight  
RC 100 = right angle

### Plating

95 = tin/gold  
(tin leadfree)  
Other platings on request

# IDC – Card Edge Connector

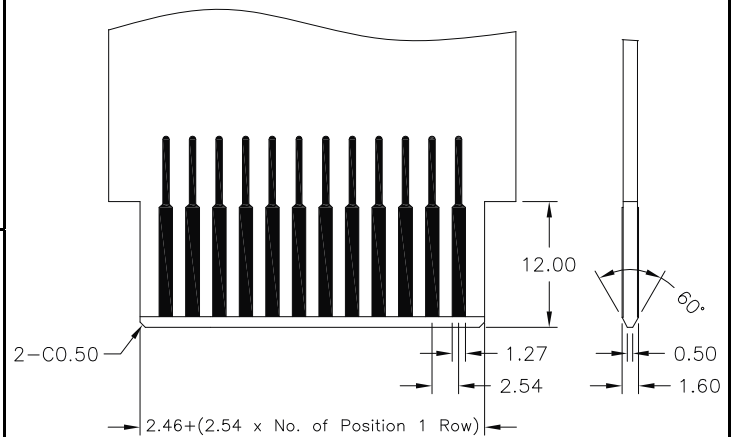
2.54mm pitch



## SPECIFICATIONS

Current rating	3 A
Insulator resistance	1000 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC
Operating temperature	- 40°C to +105°C
Contact material (RoHS compliant)	Copper alloy
Insulator material (RoHS compliant)	P.B.T. UL 94 V-0

## Recommended PCB dimensions



## APPLICATION AND FEATURES

Hi-rel dual beam contact for reliable PCB connections.  
 Accepts PCB thickness of 1.37 to 1.78mm.  
 Insulation displacement termination for 1.27mm flat cable.

## How to order

**IDC - xxx - W100 - N5**

### Nbr of contacts

**010; 020; 026**  
**034; 040; 050**

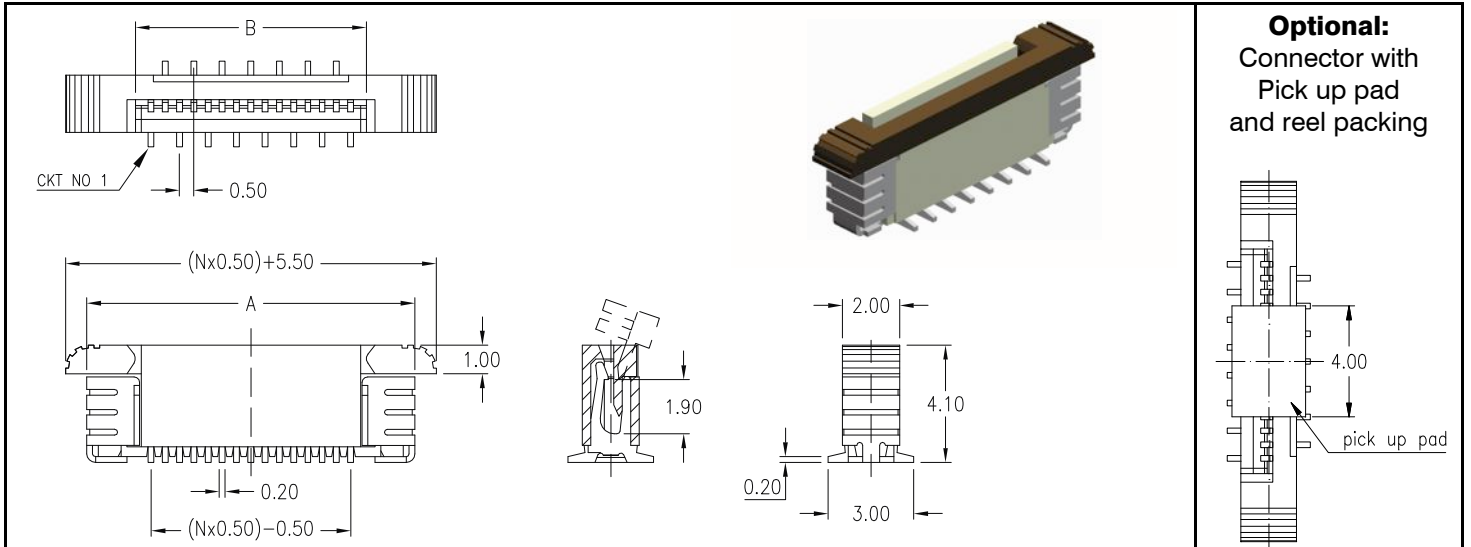
### Plating

**N5**  
 Nickel in crimp & gold in contact area

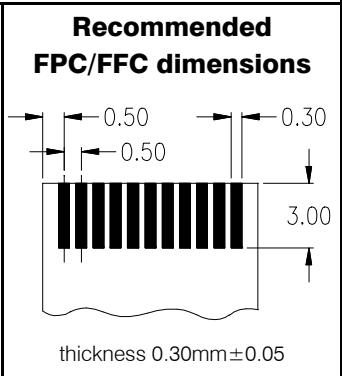
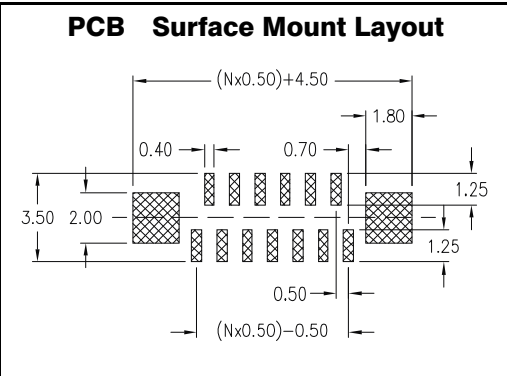
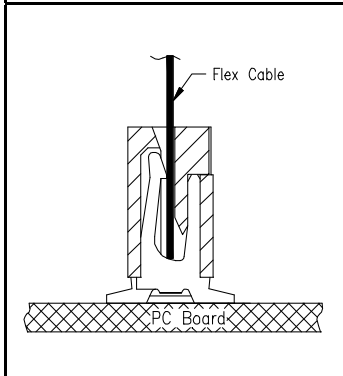
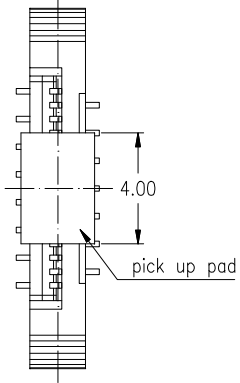
Other platings on request

# FPC/FFC Connector ZIF Type

## - SMT - 0.50mm pitch vertical



**Optional:**  
Connector with  
Pick up pad  
and reel packing



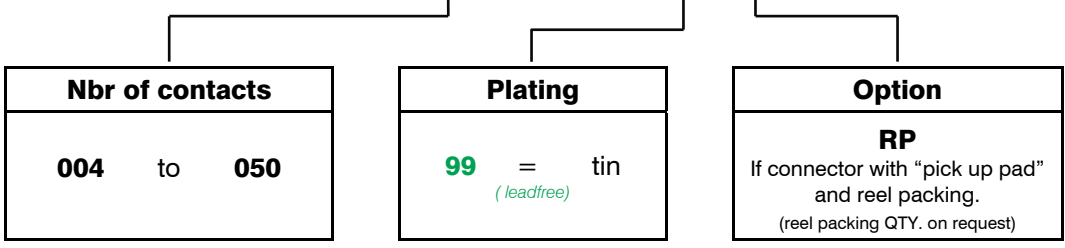
Please ask your sales office for details on reel dimension.

SPECIFICATIONS			
Current rating	0.4 A max.	Operating temperature	- 55°C to +85°C
Insulator resistance	50 MΩ min.	Processing temperature	+250°C +0/-5°C for 3sec.
Contact resistance	30 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	250 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	Nylon (RoHS compliant) UL 94 V-0

Dimensions (mm)											
Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	6.00	2.60	016	12.00	8.60	028	18.00	14.60	040	24.00	20.60
005	6.50	3.10	017	12.50	9.10	029	18.50	15.10	041	24.50	21.10
006	7.00	3.60	018	13.00	9.60	030	19.00	15.60	042	25.00	21.60
007	7.50	4.10	019	13.50	10.10	031	19.50	16.10	043	25.50	22.10
008	8.00	4.60	020	14.00	10.60	032	20.00	16.60	044	26.00	22.60
009	8.50	5.10	021	14.50	11.10	033	20.50	17.10	045	26.50	23.10
010	9.00	5.60	022	15.00	11.60	034	21.00	17.60	046	27.00	23.60
011	9.50	6.10	023	15.50	12.10	035	21.50	18.10	047	27.50	24.10
012	10.00	6.60	024	16.00	12.60	036	22.00	18.60	048	28.00	24.60
013	10.50	7.10	025	16.50	13.10	037	22.50	19.10	049	28.50	25.10
014	11.00	7.60	026	17.00	13.60	038	23.00	19.60	050	29.00	25.60
015	11.50	8.10	027	17.50	14.10	039	23.50	20.10			

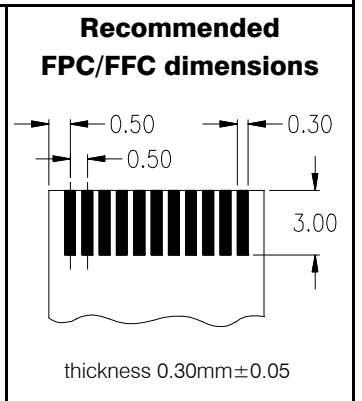
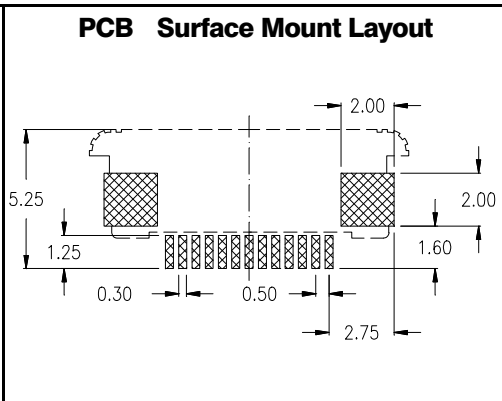
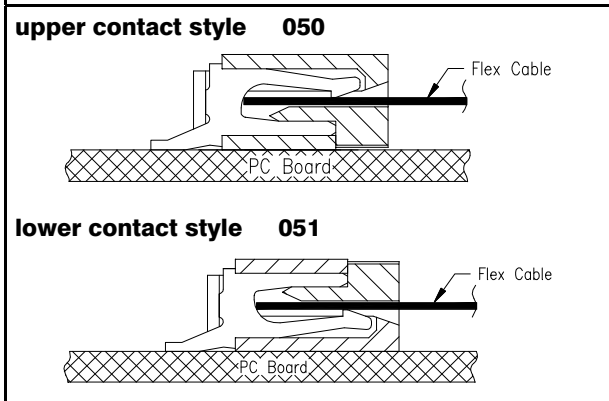
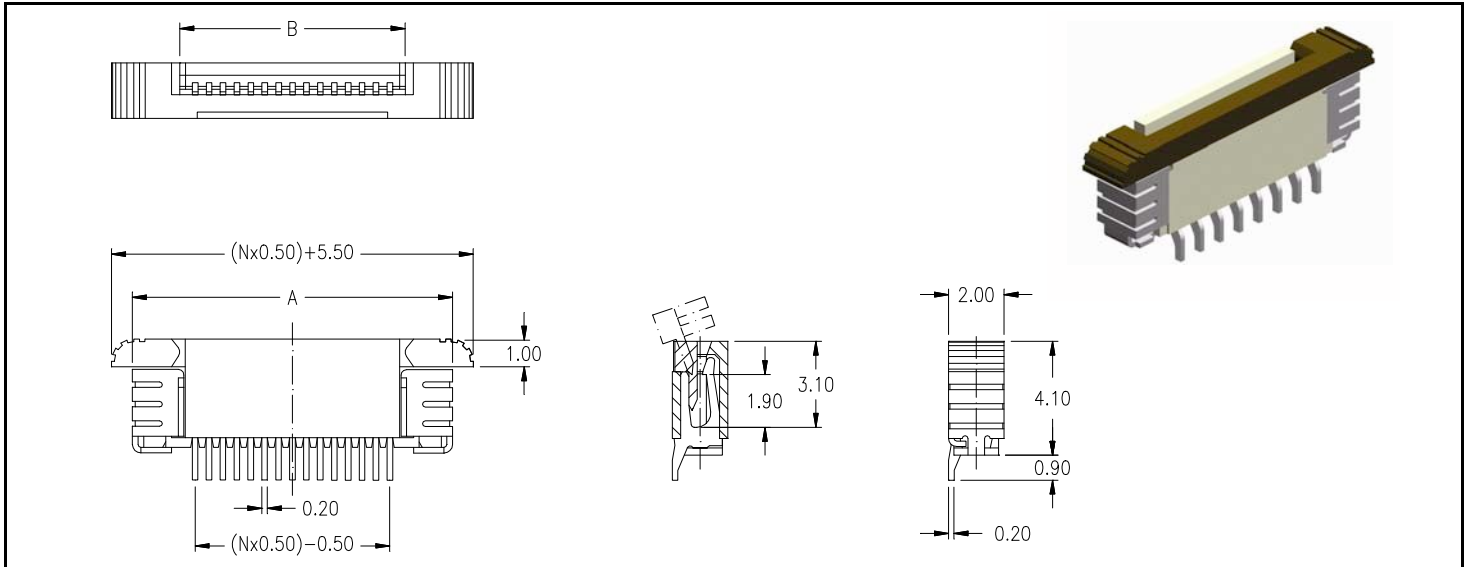
### How to order

FCZ - xxx - V 050 - 99 / XX



# FPC/FFC Connector ZIF Type

## - SMT - 0.50mm pitch horizontal

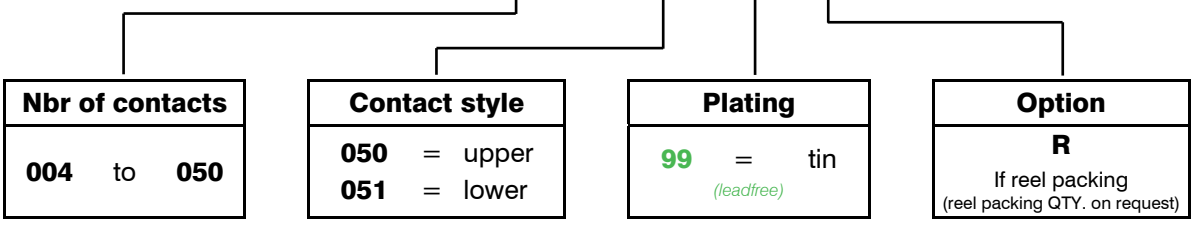


SPECIFICATIONS			
Current rating	0.4 A max.	Operating temperature	- 55°C to +85°C
Insulator resistance	50 MΩ min.	Processing temperature	+250°C +0/-5°C for 3sec.
Contact resistance	30 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	250 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	Nylon (RoHS compliant) UL 94 V-0

Dimensions (mm)											
Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	6.00	2.60	016	12.00	8.60	028	18.00	14.60	040	24.00	20.60
005	6.50	3.10	017	12.50	9.10	029	18.50	15.10	041	24.50	21.10
006	7.00	3.60	018	13.00	9.60	030	19.00	15.60	042	25.00	21.60
007	7.50	4.10	019	13.50	10.10	031	19.50	16.10	043	25.50	22.10
008	8.00	4.60	020	14.00	10.60	032	20.00	16.60	044	26.00	22.60
009	8.50	5.10	021	14.50	11.10	033	20.50	17.10	045	26.50	23.10
010	9.00	5.60	022	15.00	11.60	034	21.00	17.60	046	27.00	23.60
011	9.50	6.10	023	15.50	12.10	035	21.50	18.10	047	27.50	24.10
012	10.00	6.60	024	16.00	12.60	036	22.00	18.60	048	28.00	24.60
013	10.50	7.10	025	16.50	13.10	037	22.50	19.10	049	28.50	25.10
014	11.00	7.60	026	17.00	13.60	038	23.00	19.60	050	29.00	25.60
015	11.50	8.10	027	17.50	14.10	039	23.50	20.10			

### How to order

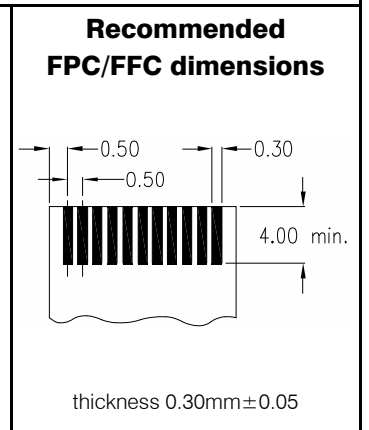
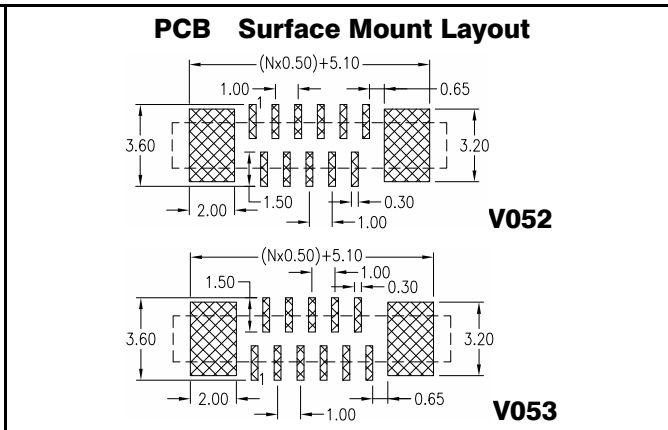
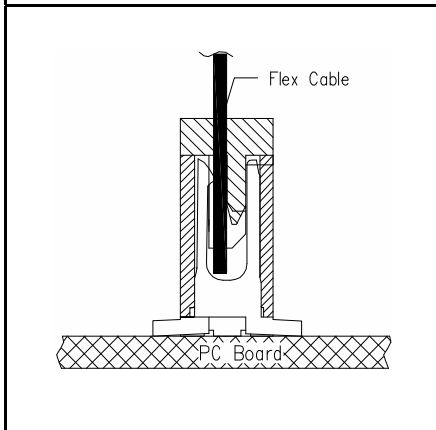
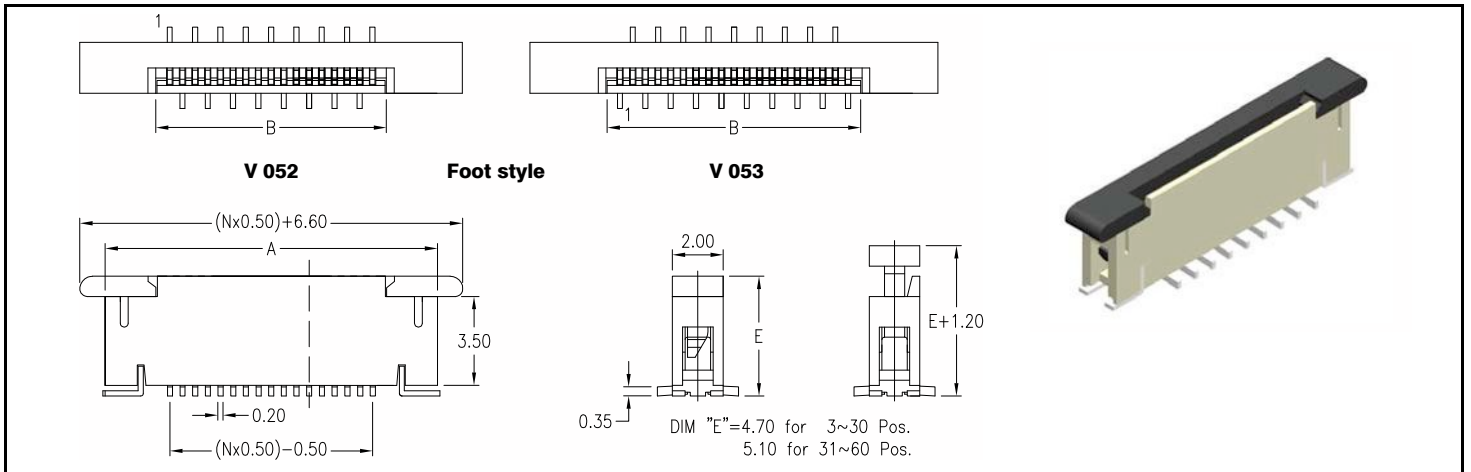
FCZ - xxx - H xxx - 99 / X





# FPC/FFC Connector ZIF Type

## - SMT - 0.50mm pitch vertical



### SPECIFICATIONS

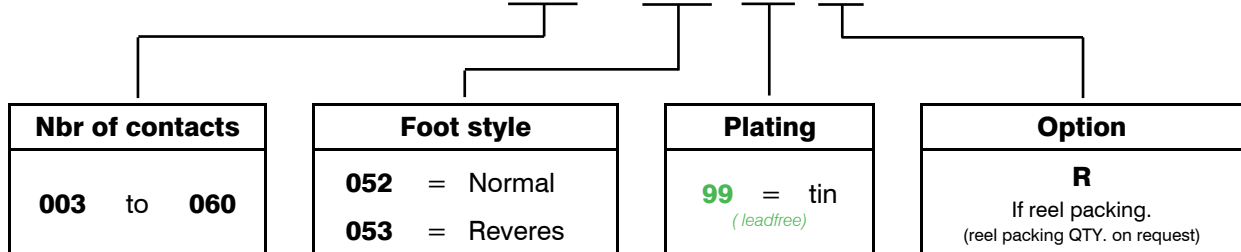
Current rating	0.4 A max.	Operating temperature	-20°C to +85°C
Insulator resistance	50 MΩ min.	Processing temperature	+250°C +0/-5°C for 3sec.
Contact resistance	30 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	250 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	LCP (RoHS compliant) UL 94 V-0
		Actuator material	PPA (RoHS compliant) UL 94 V-0

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	8.10	2.10	018	15.60	9.60	033	23.10	17.10	048	30.60	24.60
004	8.60	2.60	019	16.10	10.10	034	23.60	17.60	049	31.10	25.10
005	9.10	3.10	020	16.60	10.60	035	24.10	18.10	050	31.60	25.60
006	9.60	3.60	021	17.10	11.10	036	24.60	18.60	051	32.10	26.10
007	10.10	4.10	022	17.60	11.60	037	25.10	19.10	052	32.60	26.60
008	10.60	4.60	023	18.10	12.10	038	25.60	19.60	053	33.10	27.10
009	11.10	5.10	024	18.60	12.60	039	26.10	20.10	054	33.60	27.60
010	11.60	5.60	025	19.10	13.10	040	26.60	20.60	055	34.10	28.10
011	12.10	6.10	026	19.60	13.60	041	27.10	21.10	056	34.60	28.60
012	12.60	6.60	027	20.10	14.10	042	27.60	21.60	057	35.10	29.10
013	13.10	7.10	028	20.60	14.60	043	28.10	22.10	058	35.60	29.60
014	13.60	7.60	029	21.10	15.10	044	28.60	22.60	059	36.10	30.10
015	14.10	8.10	030	21.60	15.60	045	29.10	23.10	060	36.60	30.60
016	14.60	8.60	031	22.10	16.10	046	29.60	23.60			
017	15.10	9.10	032	22.60	16.60	047	30.10	24.10			

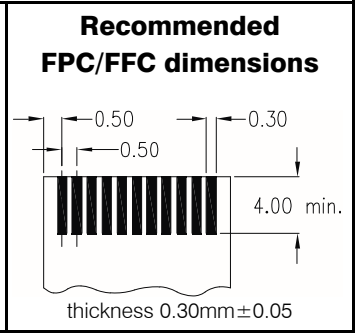
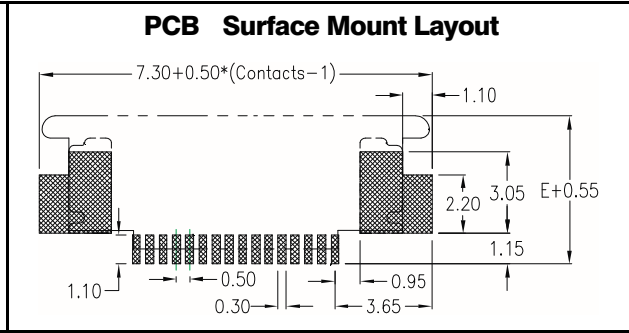
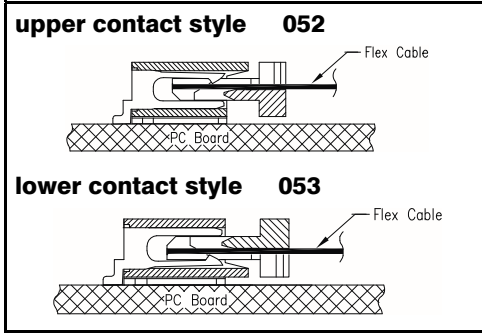
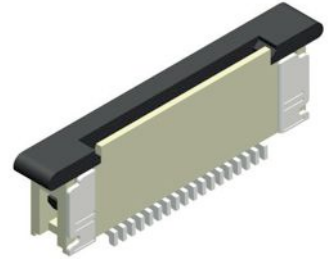
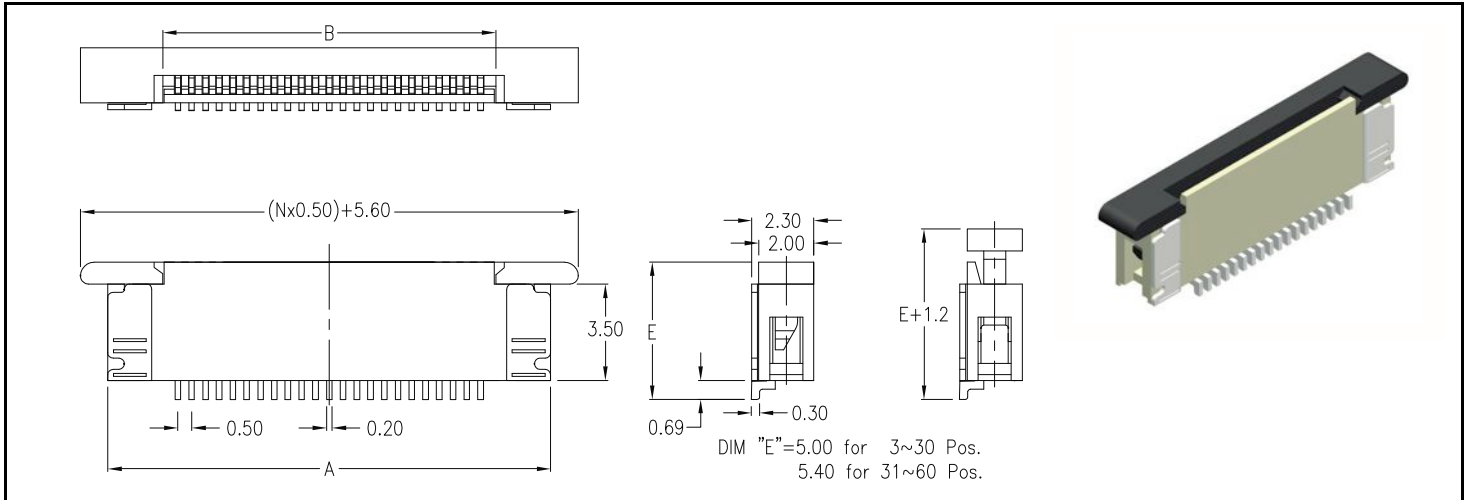
How to order

FCZ - xxx - V xxx - 99 / X



# FPC/FFC Connector ZIF Type

## - SMT - 0.50mm pitch horizontal

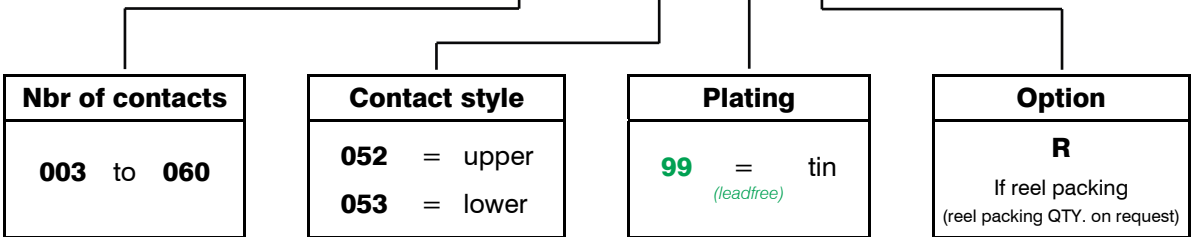


SPECIFICATIONS			
Current rating	0.4 A max.	Operating temperature	-20°C to +85°C
Insulator resistance	50 MΩ min.	Processing temperature	+250°C +0/-5°C for 3sec.
Contact resistance	30 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	250 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	LCP (RoHS compliant) UL 94 V-0
		Actuator material	PPA (RoHS compliant) UL 94 V-0

Dimensions (mm)											
Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	6.10	2.10	018	13.60	9.60	033	21.10	17.10	048	28.60	24.60
004	6.60	2.60	019	14.10	10.10	034	21.60	17.60	049	29.10	25.10
005	7.10	3.10	020	14.60	10.60	035	22.10	18.10	050	29.60	25.60
006	7.60	3.60	021	15.10	11.10	036	22.60	18.60	051	30.10	26.10
007	8.10	4.10	022	15.60	11.60	037	23.10	19.10	052	30.60	26.60
008	8.60	4.60	023	16.10	12.10	038	23.60	19.60	053	31.10	27.10
009	9.10	5.10	024	16.60	12.60	039	24.10	20.10	054	31.60	27.60
010	9.60	5.60	025	17.10	13.10	040	24.60	20.60	055	32.10	28.10
011	10.10	6.10	026	17.60	13.60	041	25.10	21.10	056	32.60	28.60
012	10.60	6.60	027	18.10	14.10	042	25.60	21.60	057	33.10	29.10
013	11.10	7.10	028	18.60	14.60	043	26.10	22.10	058	33.60	29.60
014	11.60	7.60	029	19.10	15.10	044	26.60	22.60	059	34.10	30.10
015	12.10	8.10	030	19.60	15.60	045	27.10	23.10	060	34.60	30.60
016	12.60	8.60	031	20.10	16.10	046	27.60	23.60			
017	13.10	9.10	032	20.60	16.60	047	28.10	24.10			

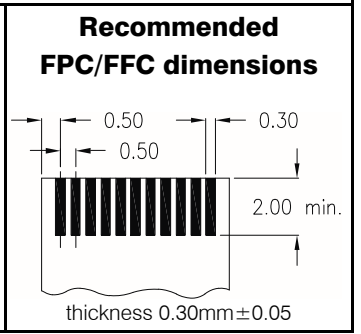
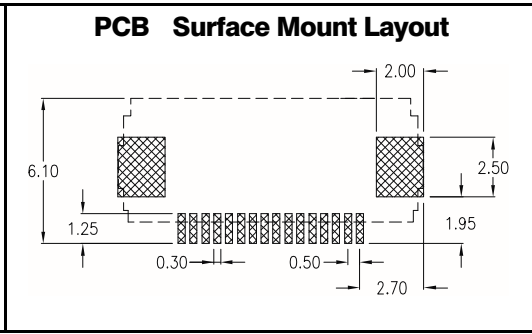
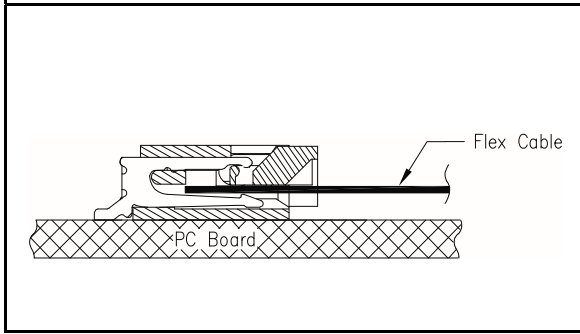
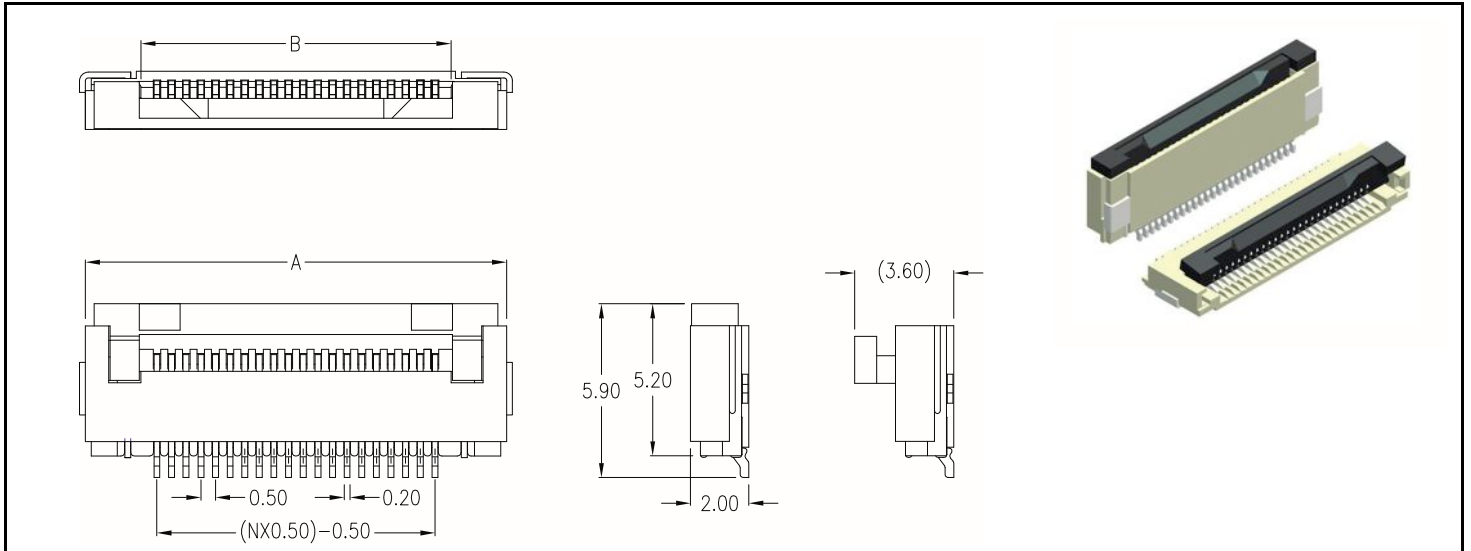
### How to order

FCZ - xxx - H xxx - 99 / X



# FPC/FFC Connector ZIF "Easy-on" Type

- SMT - 0.50mm pitch horizontal



### SPECIFICATIONS

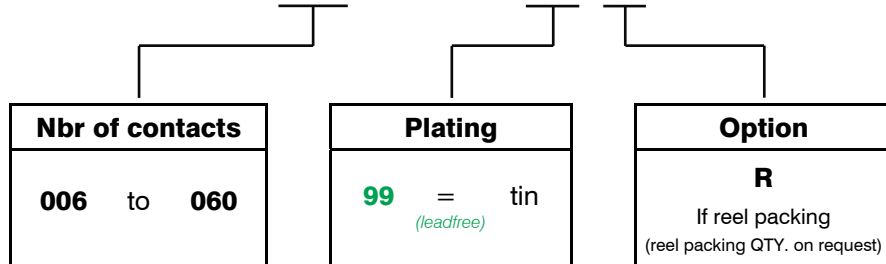
Current rating	0.4 A max.	Operating temperature	- 20°C to +85°C
Insulator resistance	50 MΩ min.	Processing temperature	+250°C +0/-5°C for 3sec.
Contact resistance	30 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	250 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	LCP UL 94 V-0 (RoHS compliant)
		Actuator material	PPA UL 94 V-0 (RoHS compliant)

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
006	7.40	3.60	020	14.40	10.60	034	21.40	17.60	048	28.40	24.60
007	7.90	4.10	021	14.90	11.10	035	21.90	18.10	049	28.90	25.10
008	8.40	4.60	022	15.40	11.60	036	22.40	18.60	050	29.40	25.60
009	8.90	5.10	023	15.90	12.10	037	22.90	19.10	051	29.90	26.10
010	9.40	5.60	024	16.40	12.60	038	23.40	19.60	052	30.40	26.60
011	9.90	6.10	025	16.90	13.10	039	23.90	20.10	053	30.90	27.10
012	10.40	6.60	026	17.40	13.60	040	24.40	20.60	054	31.40	27.60
013	10.90	7.10	027	17.90	14.10	041	24.90	21.10	055	31.90	28.10
014	11.40	7.60	028	18.40	14.60	042	25.40	21.60	056	32.40	28.60
015	11.90	8.10	029	18.90	15.10	043	25.90	22.10	057	32.90	29.10
016	12.40	8.60	030	19.40	15.60	044	26.40	22.60	058	33.40	29.60
017	12.90	9.10	031	19.90	16.10	045	26.90	23.10	059	33.90	30.10
018	13.40	9.60	032	20.40	16.60	046	27.40	23.60	060	34.40	30.60
019	13.90	10.10	033	20.90	17.10	047	27.90	24.10			

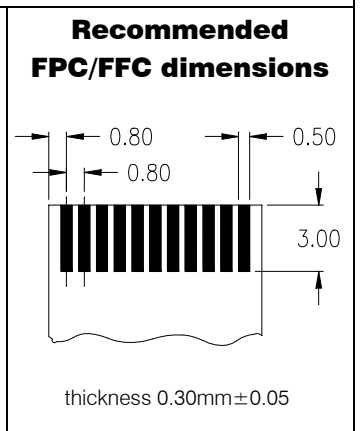
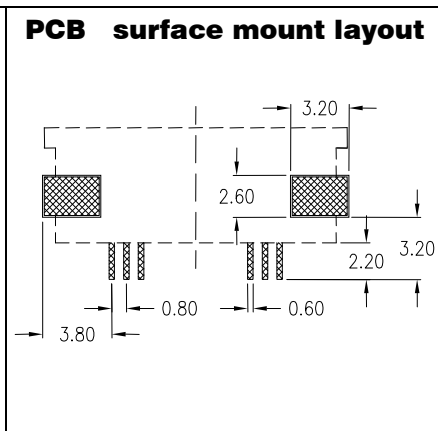
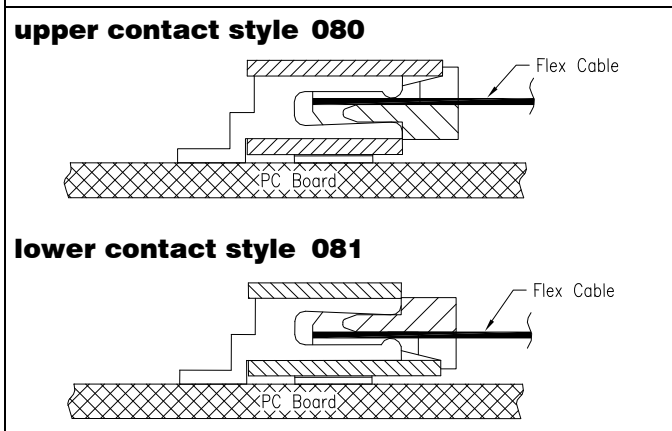
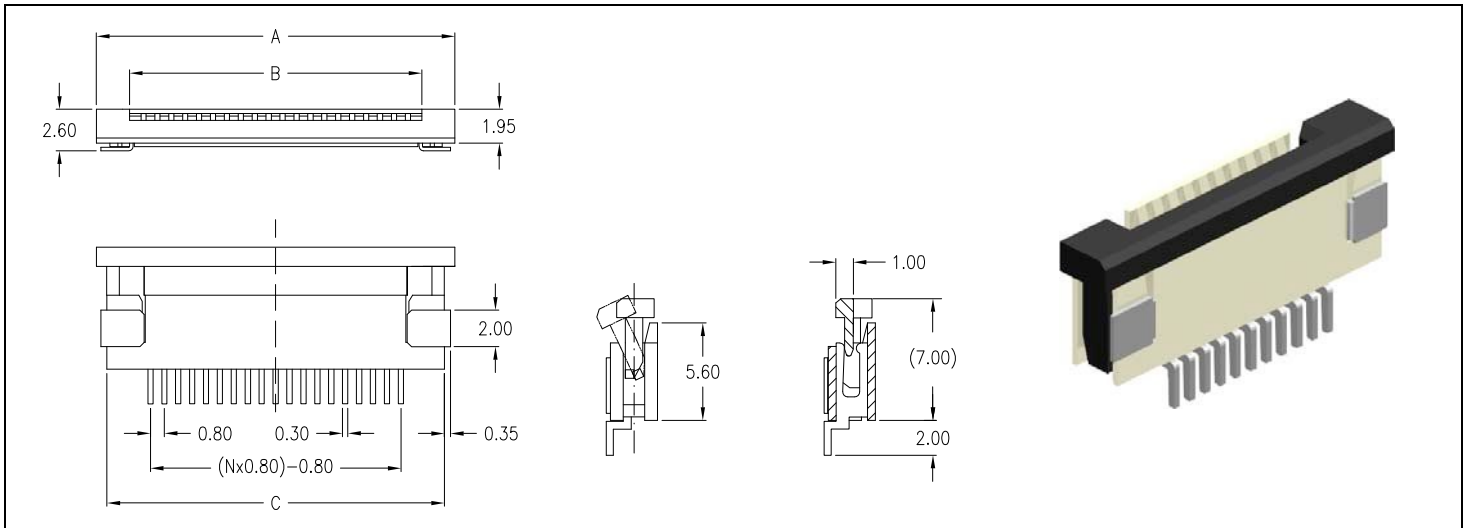
How to order

FCZ - xxx - H 058 - 99 / X



# FPC/FFC Connector ZIF Type

## - SMT - 0.80mm pitch horizontal



### SPECIFICATIONS

Current rating: 0.5 A max.  
 Insulator resistance: 100 MΩ min.  
 Contact resistance: 20 mΩ max.  
 Withstanding voltage: 500 V AC/1 Min.

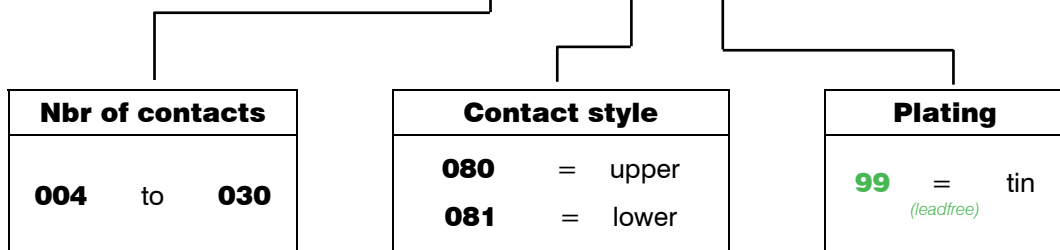
Operating temperature: -20°C to +105°C  
 Processing temperature: +250°C +0/-5°C for 3 sec.  
 Contact material: (RoHS compliant) Phosphor Bronze  
 Contact plating: Tin (leadfree)  
 Insulator material: (RoHS compliant) LCP UL 94 V-0  
 Actuator material: (RoHS compliant) PPA UL 94 V-0

### Dimensions (mm)

Contacts	DIM"A"	DIM"B"	DIM"C"	Contacts	DIM"A"	DIM"B"	DIM"C"	Contacts	DIM"A"	DIM"B"	DIM"C"	Contacts	DIM"A"	DIM"B"	DIM"C"
004	9.50	4.25	8.20	011	15.10	9.85	13.80	018	20.70	15.45	19.40	025	26.30	21.05	25.00
005	10.30	5.05	9.00	012	15.90	10.65	14.60	019	21.50	16.25	20.20	026	27.10	21.85	25.80
006	11.10	5.85	9.80	013	16.70	11.45	15.40	020	22.30	17.05	21.00	027	27.90	22.65	26.60
007	11.90	6.65	10.60	014	17.50	12.25	16.20	021	23.10	17.85	21.80	028	28.70	23.45	27.40
008	12.70	7.45	11.40	015	18.30	13.05	17.00	022	23.90	18.65	22.60	029	29.50	24.25	28.20
009	13.50	8.25	12.20	016	19.10	13.85	17.80	023	24.70	19.45	23.40	030	30.30	25.05	29.00
010	14.30	9.05	13.00	017	19.90	14.65	18.60	024	25.50	20.25	24.20				

### How to order

FCZ - xxx - H xxx - 99



# FPC/FFC Connector ZIF Type

## - SMT - 1.00mm pitch vertical



Technical drawings showing dimensions: B, A, (nx1.00)+6.00, 1.00, 1.90, 2.00, 4.10, 0.20, 3.00, (nx1.00)-1.00, 0.20, (nx1.00)-1.00.

Optional:  
Connector with Pick up pad and reel packing

pick up pad

Flex Cable  
PC Board

### PCB Surface Mount Layout

Dimensions: (nx1.00)+5.00, 1.80, 0.40, 1.20, 1.25, 3.50, 2.00, 1.00, (nx1.00)-1.00, 1.25.

### Recommended FPC/FFC dimensions

Dimensions: 1.00, 0.70, 1.00, 3.00, thickness 0.30mm±0.05

2.65

Please ask your sales office for details on reel dimension.

### SPECIFICATIONS

Current rating	0.4 A max.	Operating temperature	- 55°C to +85°C
Insulator resistance	50 MΩ min.	Processing temperature	+250°C +0/-5°C for 3 sec.
Contact resistance	30 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	250 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	Nylon (RoHS compliant) UL 94 V-0

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	8.50	5.10	010	14.50	11.10	016	20.50	17.10	022	26.50	23.10
005	9.50	6.10	011	15.50	12.10	017	21.50	18.10	023	27.50	24.10
006	10.50	7.10	012	16.50	13.10	018	22.50	19.10	024	28.50	25.10
007	11.50	8.10	013	17.50	14.10	019	23.50	20.10			
008	12.50	9.10	014	18.50	15.10	020	24.50	21.10			
009	13.50	10.10	015	19.50	16.10	021	25.50	22.10			

### How to order

FCZ - xxx - V 100 - 99 / XX

**Nbr of contacts**

004 to 024

**Plating**

99 = tin  
(leadfree)

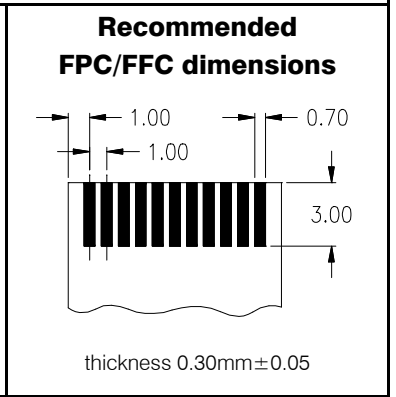
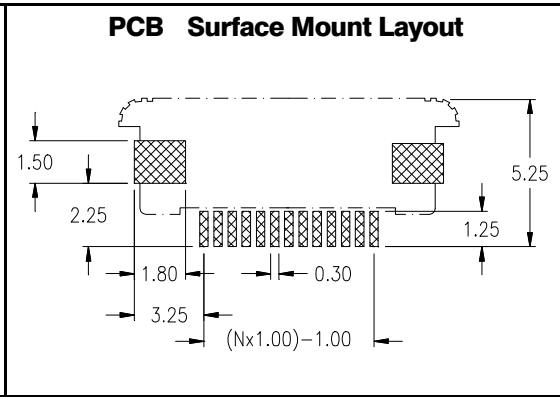
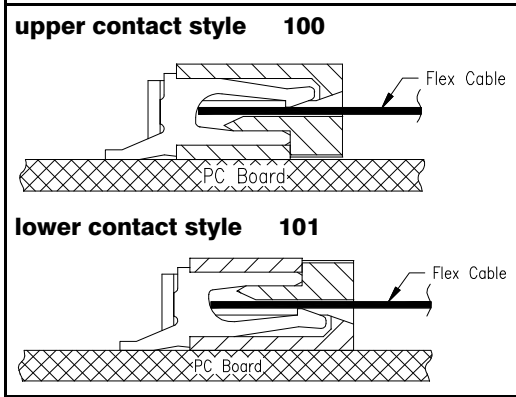
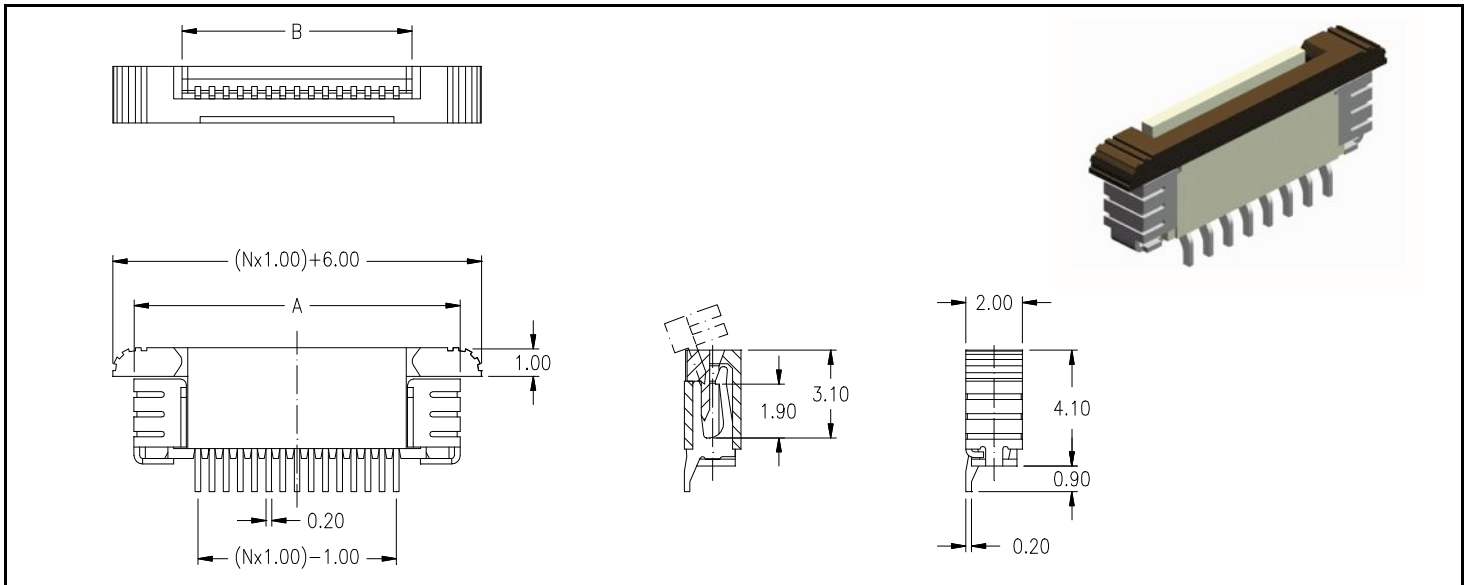
**Option**

RP

If connector with "pick up pad" and reel packing.  
(reel packing QTY. on request)

# FPC/FFC Connector ZIF Type

## - SMT - 1.00mm pitch horizontal



### SPECIFICATIONS

Current rating 0.4 A max.  
 Insulator resistance 50 MΩ min.  
 Contact resistance 30 mΩ max.  
 Withstanding voltage 250 V AC/1 Min.

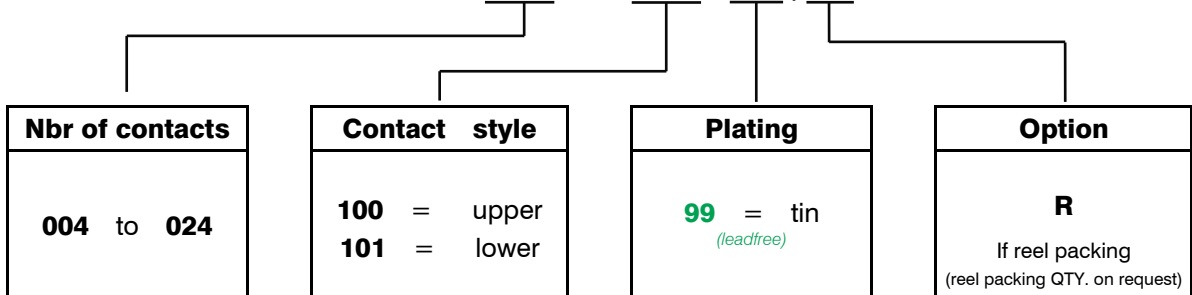
Operating temperature -55°C to +85°C  
 Processing temperature +250°C +0/-5°C for 3sec.  
 Contact material (RoHS compliant) Phosphor Bronze  
 Contact plating Tin (leadfree)  
 Insulator material (RoHS compliant) Nylon UL 94 V-0

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	8.50	5.10	010	14.50	11.10	016	20.50	17.10	022	26.50	23.10
005	9.50	6.10	011	15.50	12.10	017	21.50	18.10	023	27.50	24.10
006	10.50	7.10	012	16.50	13.10	018	22.50	19.10	024	28.50	25.10
007	11.50	8.10	013	17.50	14.10	019	23.50	20.10			
008	12.50	9.10	014	18.50	15.10	020	24.50	21.10			
009	13.50	10.10	015	19.50	16.10	021	25.50	22.10			

### How to order

FCZ - xxx - H xxx - 99 / X



# FPC/FFC Connector ZIF Type

## - SMT - 1.00mm pitch vertical



**Optional:**  
Connector with Pick up pad and reel packing

**PCB Surface Mount Layout**

**Recommended FPC/FFC dimensions**

Please ask your sales office for details on reel dimension.

### SPECIFICATIONS

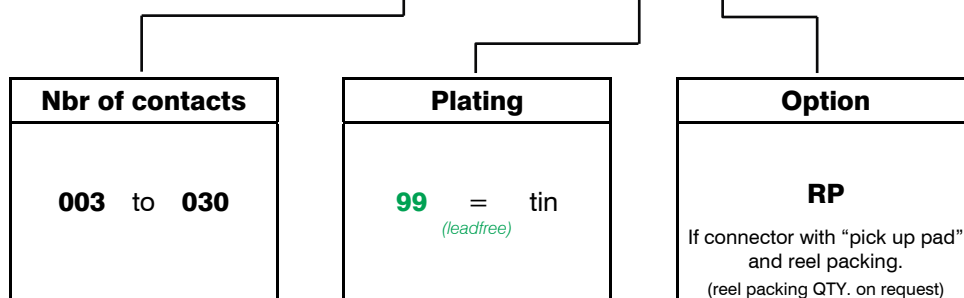
Current rating	0.5 A max.	Operating temperature	- 40°C to +105°C
Insulator resistance	100 MΩ min.	Processing temperature	+250°C +0/-5°C for 3 sec.
Contact resistance	20 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	500 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	LCP UL 94 V-0 (RoHS compliant)
		Actuator material	PPA UL 94 V-0 (RoHS compliant)

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	8.00	4.20	010	15.00	11.20	017	22.00	18.20	024	29.00	25.20
004	9.00	5.20	011	16.00	12.20	018	23.00	19.20	025	30.00	26.20
005	10.00	6.20	012	17.00	13.20	019	24.00	20.20	026	31.00	27.20
006	11.00	7.20	013	18.00	14.20	020	25.00	21.20	027	32.00	28.20
007	12.00	8.20	014	19.00	15.20	021	26.00	22.20	028	33.00	29.20
008	13.00	9.20	015	20.00	16.20	022	27.00	23.20	029	34.00	30.20
009	14.00	10.20	016	21.00	17.20	023	28.00	24.20	030	35.00	31.20

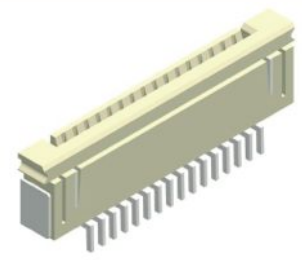
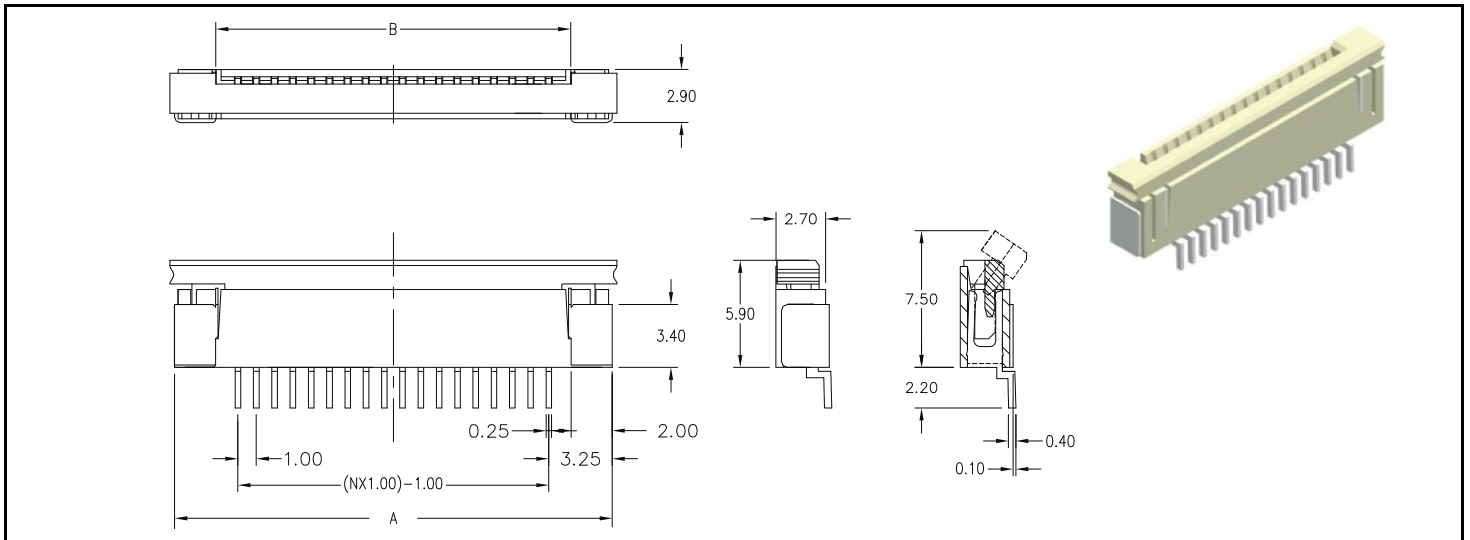
### How to order

FCZ - xxx - V 115 - 99 / XX



# FPC/FFC Connector ZIF Type

## - SMT - 1.00mm pitch horizontal



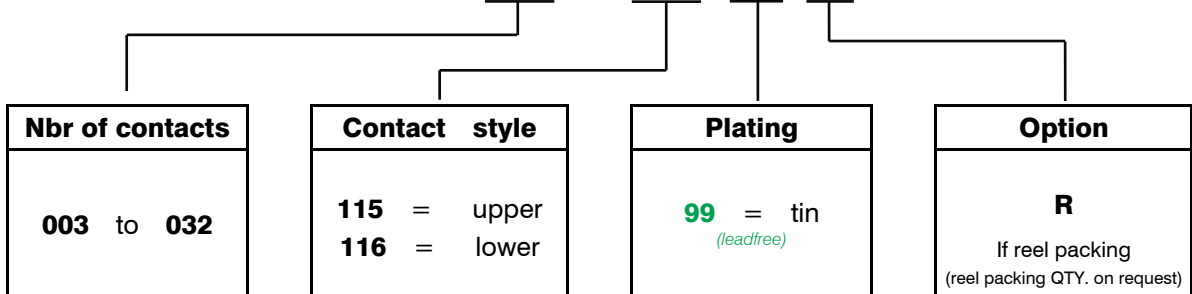
<p><b>upper contact style 115</b></p> <p><b>lower contact style 116</b></p>	<p><b>PCB Surface Mount Layout</b></p>	<p><b>Recommended FPC/FFC dimensions</b></p> <p>thickness 0.30mm±0.05</p>
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SPECIFICATIONS			
Current rating	0.5 A max.	Operating temperature	- 40°C to +105°C.
Insulator resistance	100 MΩ min.	Processing temperature	+250°C +0/-5°C for 3sec.
Contact resistance	20 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	500 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	LCP UL 94 V-0 (RoHS compliant)
		Actuator material	PPA UL 94 V-0 (RoHS compliant)

Dimensions (mm)											
Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	8.50	4.20	011	16.50	12.20	019	24.50	20.20	027	32.50	28.20
004	9.50	5.20	012	17.50	13.20	020	25.50	21.20	028	33.50	29.20
005	10.50	6.20	013	18.50	14.20	021	26.50	22.20	029	34.50	30.20
006	11.50	7.20	014	19.50	15.20	022	27.50	23.20	030	35.50	31.20
007	12.50	8.20	015	20.50	16.20	023	28.50	24.20	031	36.50	32.20
008	13.50	9.20	016	21.50	17.20	024	29.50	25.20	032	37.50	33.20
009	14.50	10.20	017	22.50	18.20	025	30.50	26.20			
010	15.50	11.20	018	23.50	19.20	026	31.50	27.20			

### How to order

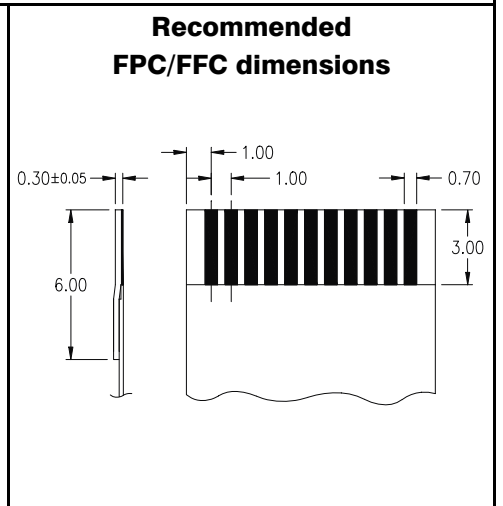
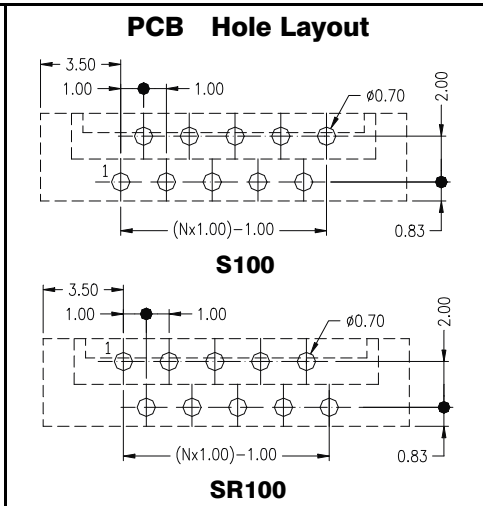
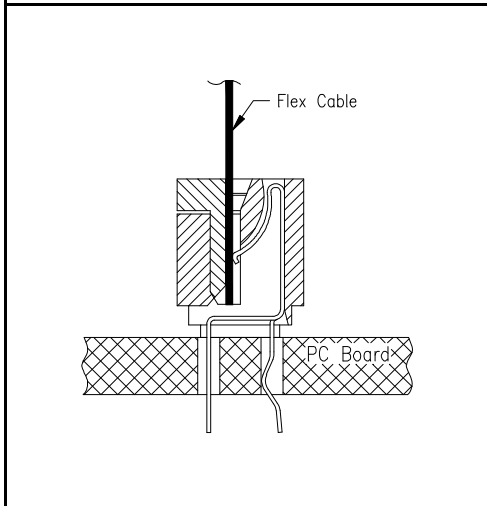
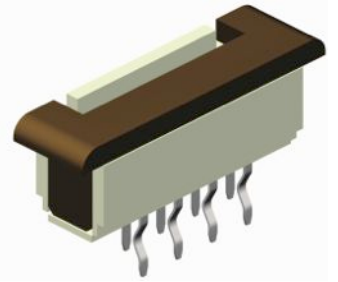
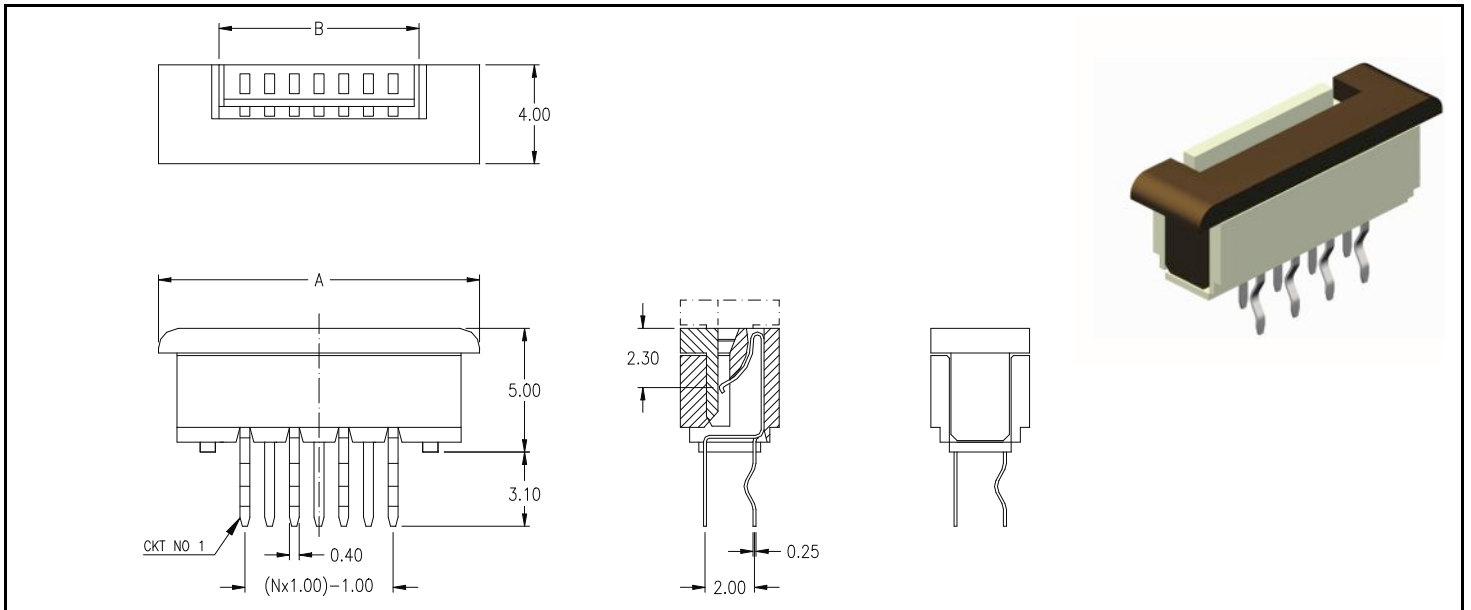
FCZ - xxx - H xxx - 99 / X





# FPC/FFC Connector ZIF Type

## - THT - 1.00mm pitch vertical



### SPECIFICATIONS

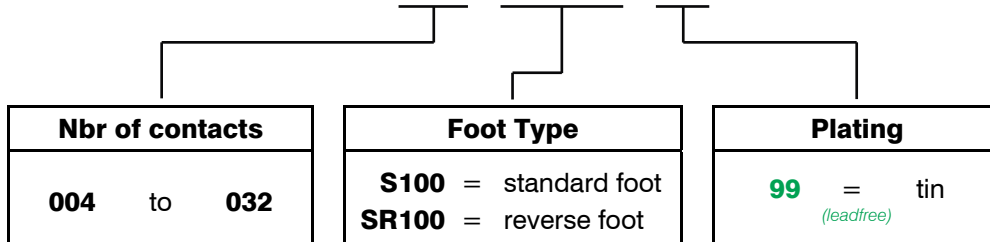
Current rating	0.4 A max.	Operating temperature	- 55°C to +85°C
Insulator resistance	50 MΩ min.	Contact material	(RoHS compliant) Phosphor Bronze
Contact resistance	30 mΩ max.	Contact plating	Tin (leadfree)
Withstanding voltage	250 V AC/1 Min.	Insulator material	(RoHS compliant) Nylon UL 94 V-0

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	10.00	5.20	012	18.00	13.20	020	26.00	21.20	028	34.00	29.20
005	11.00	6.20	013	19.00	14.20	021	27.00	22.20	029	35.00	30.20
006	12.00	7.20	014	20.00	15.20	022	28.00	23.20	030	36.00	31.20
007	13.00	8.20	015	21.00	16.20	023	29.00	24.20	031	37.00	32.20
008	14.00	9.20	016	22.00	17.20	024	30.00	25.20	032	38.00	33.20
009	15.00	10.20	017	23.00	18.20	025	31.00	26.20			
010	16.00	11.20	018	24.00	19.20	026	32.00	27.20			
011	17.00	12.20	019	25.00	20.20	027	33.00	28.20			

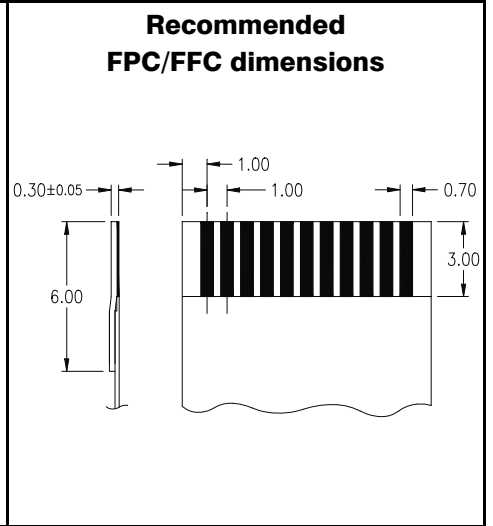
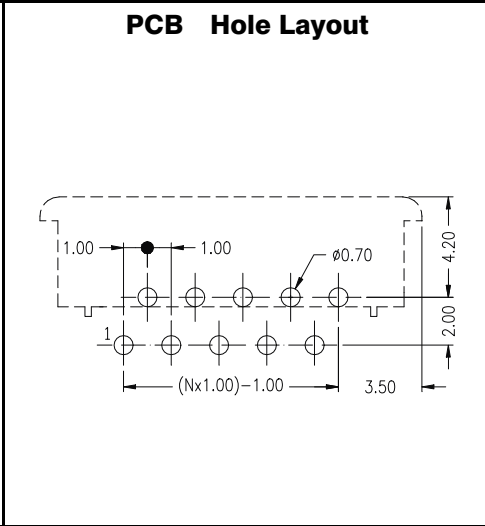
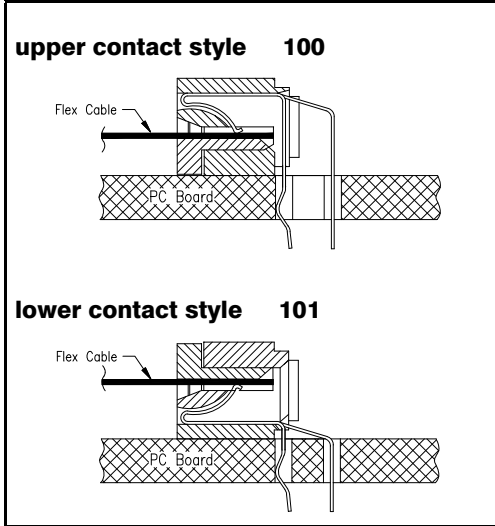
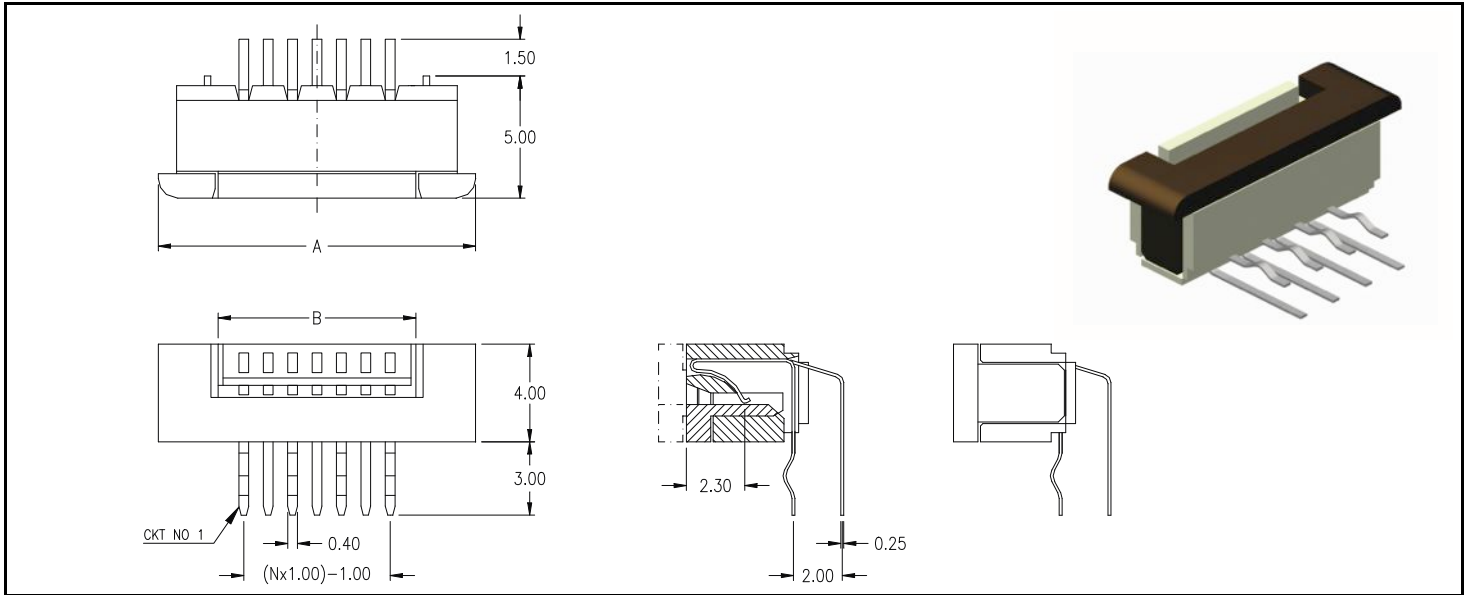
How to order

FCZ - xxx - SX100 - 99



# FPC/FFC Connector ZIF Type

- THT - 1.00mm pitch right angle

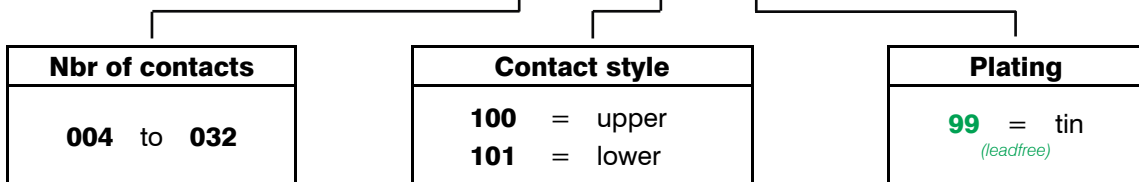


SPECIFICATIONS			
Current rating	0.4 A max.	Operating temperature	- 55°C to +85°C
Insulator resistance	50 MΩ min.	Contact material	(RoHS compliant) Phosphor Bronze
Contact resistance	30 mΩ max.	Contact plating	Tin (leadfree)
Withstanding voltage	250 V AC/1 Min.	Insulator material	(RoHS compliant) Nylon UL 94 V-0

Dimensions (mm)											
Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	10.00	5.20	012	18.00	13.20	020	26.00	21.20	028	34.00	29.20
005	11.00	6.20	013	19.00	14.20	021	27.00	22.20	029	35.00	30.20
006	12.00	7.20	014	20.00	15.20	022	28.00	23.20	030	36.00	31.20
007	13.00	8.20	015	21.00	16.20	023	29.00	24.20	031	37.00	32.20
008	14.00	9.20	016	22.00	17.20	024	30.00	25.20	032	38.00	33.20
009	15.00	10.20	017	23.00	18.20	025	31.00	26.20			
010	16.00	11.20	018	24.00	19.20	026	32.00	27.20			
011	17.00	12.20	019	25.00	20.20	027	33.00	28.20			

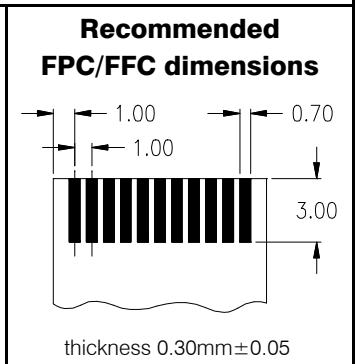
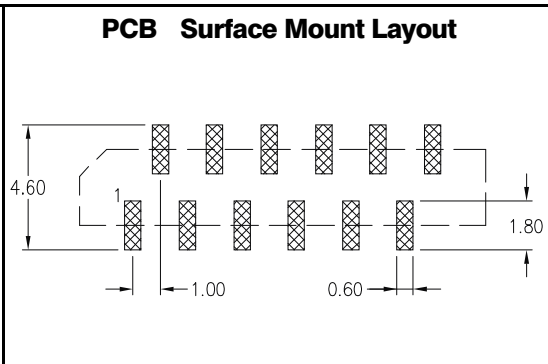
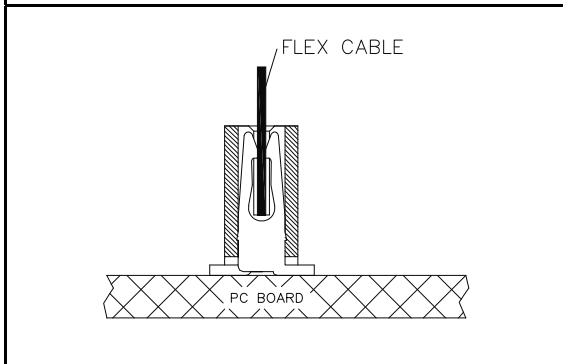
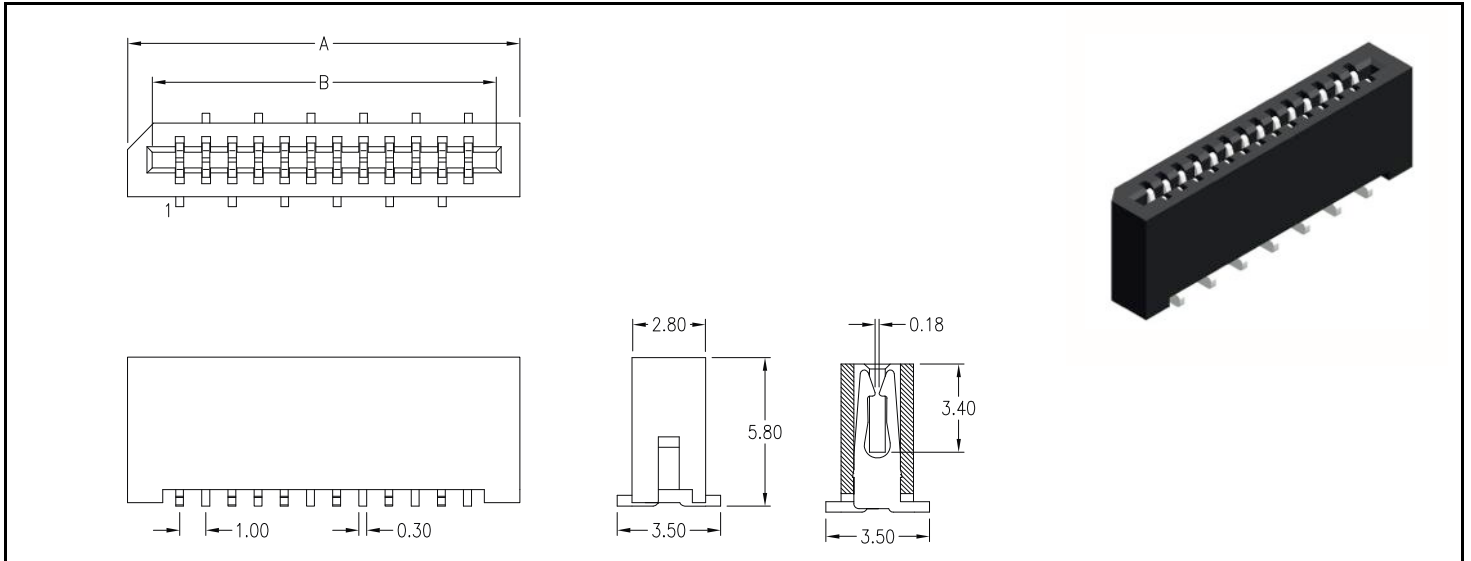
How to order

FCZ - xxx - R xxx - 99



# FPC/FFC Connector LIF Type

## - SMT - 1.00mm pitch vertical



### SPECIFICATIONS

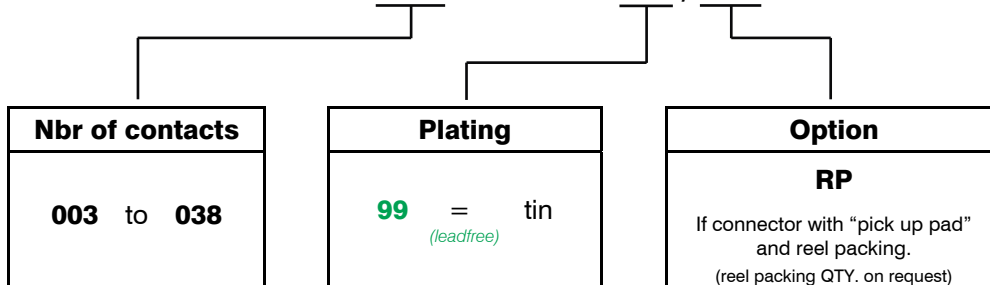
Current rating	0.5 A max.	Operating temperature	- 40°C to +105°C
Insulator resistance	100 MΩ min.	Processing temperature	+250°C +0/-5°C for 3 sec.
Contact resistance	20 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	500 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	Nylon (black) UL 94 V-0

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	6.00	4.10	012	15.00	13.10	021	24.00	22.10	030	33.00	31.10
004	7.00	5.10	013	16.00	14.10	022	25.00	23.10	031	34.00	32.10
005	8.00	6.10	014	17.00	15.10	023	26.00	24.10	032	35.00	33.10
006	9.00	7.10	015	18.00	16.10	024	27.00	25.10	033	36.00	34.10
007	10.00	8.10	016	19.00	17.10	025	28.00	26.10	034	37.00	35.10
008	11.00	9.10	017	20.00	18.10	026	29.00	27.10	035	38.00	36.10
009	12.00	10.10	018	21.00	19.10	027	30.00	28.10	036	39.00	37.10
010	13.00	11.10	019	22.00	20.10	028	31.00	29.10	037	40.00	38.10
011	14.00	12.10	020	23.00	21.10	029	32.00	30.10	038	41.00	39.10

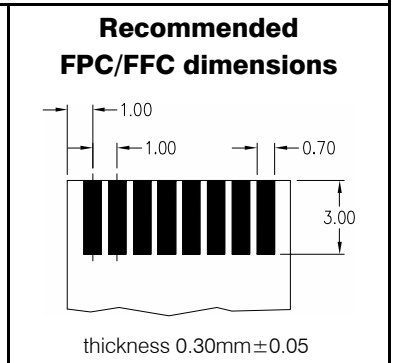
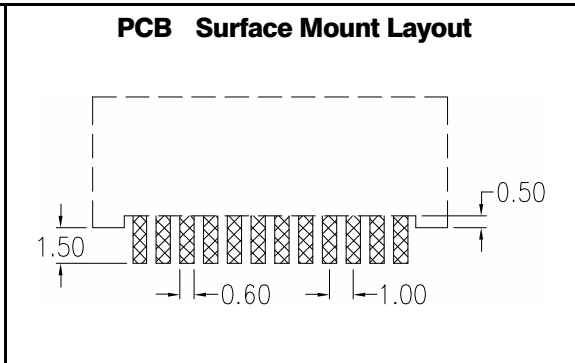
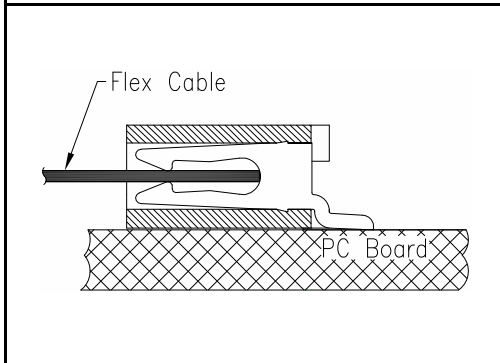
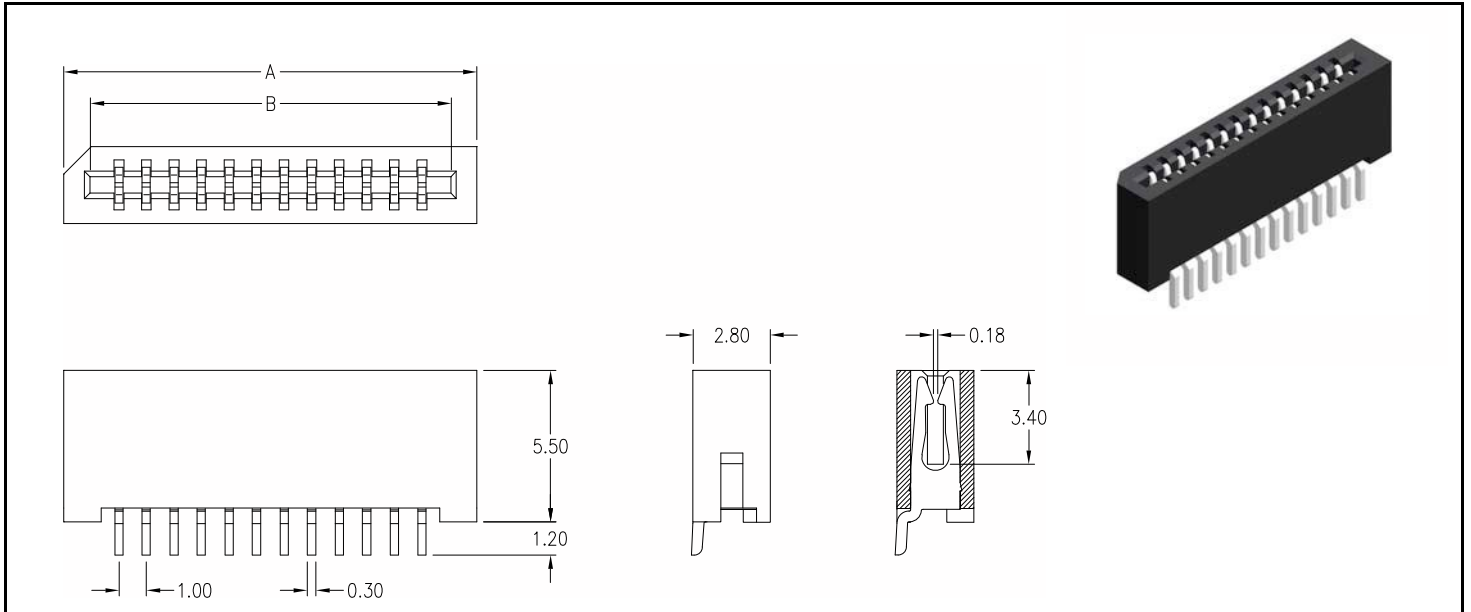
How to order

FCL - xxx - V 100 - 99 / XX



# FPC/FFC Connector LIF Type

## - SMT - 1.00mm pitch horizontal



### SPECIFICATIONS

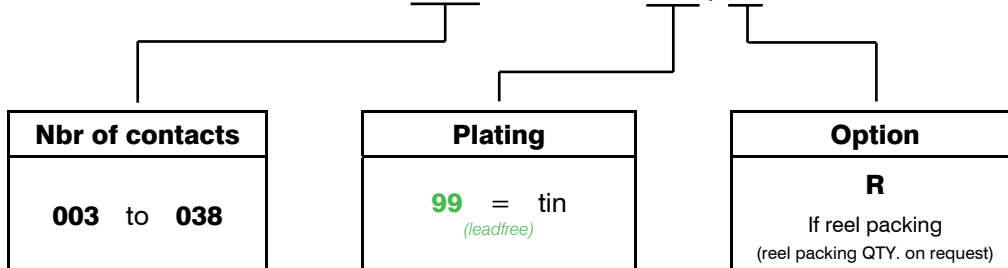
Current rating	0.5 A max.	Operating temperature	- 40°C to +105°C
Insulator resistance	100 MΩ min.	Processing temperature	+250°C +0/-5°C for 3 sec.
Contact resistance	20 mΩ max.	Contact material	Phosphor Bronze (RoHS compliant)
Withstanding voltage	500 V AC/1 Min.	Contact plating	Tin (leadfree)
		Insulator material	Nylon (black) UL 94 V-0 (RoHS compliant)

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	6.00	4.10	012	15.00	13.10	021	24.00	22.10	030	33.00	31.10
004	7.00	5.10	013	16.00	14.10	022	25.00	23.10	031	34.00	32.10
005	8.00	6.10	014	17.00	15.10	023	26.00	24.10	032	35.00	33.10
006	9.00	7.10	015	18.00	16.10	024	27.00	25.10	033	36.00	34.10
007	10.00	8.10	016	19.00	17.10	025	28.00	26.10	034	37.00	35.10
008	11.00	9.10	017	20.00	18.10	026	29.00	27.10	035	38.00	36.10
009	12.00	10.10	018	21.00	19.10	027	30.00	28.10	036	39.00	37.10
010	13.00	11.10	019	22.00	20.10	028	31.00	29.10	037	40.00	38.10
011	14.00	12.10	020	23.00	21.10	029	32.00	30.10	038	41.00	39.10

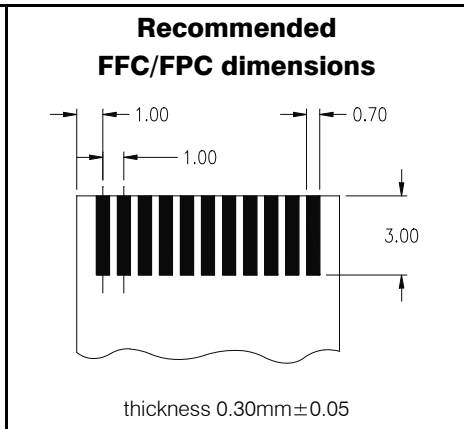
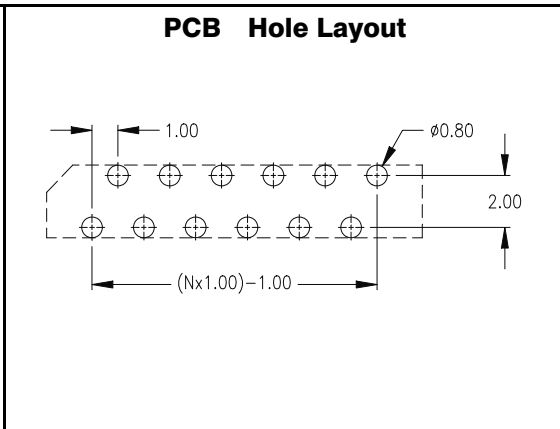
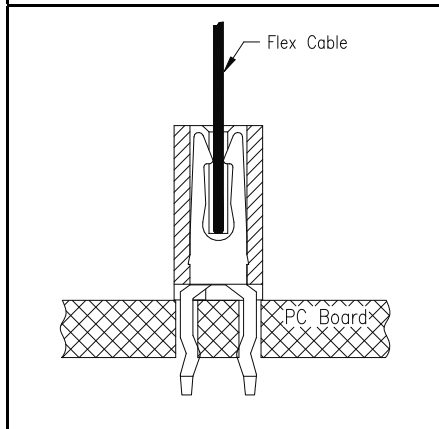
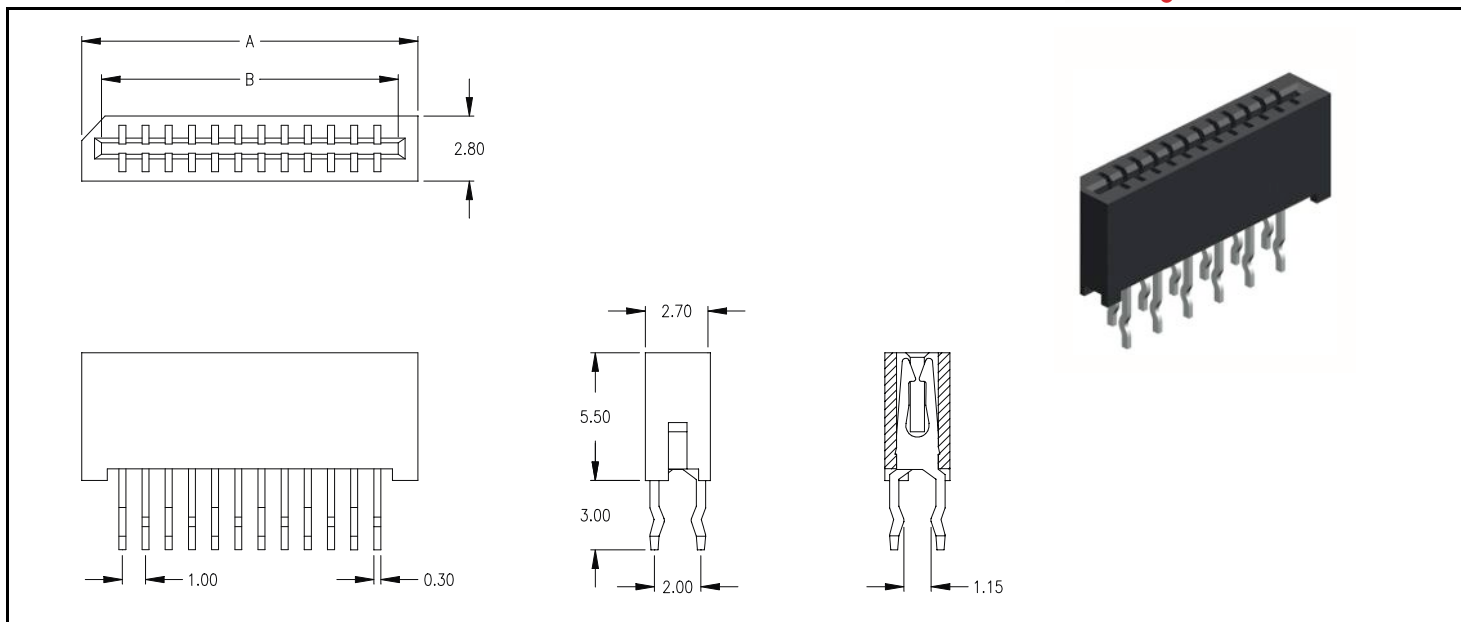
How to order

FCL - xxx - H100 - 99 / X



# FFC/FPC Connector LIF Type

## - THT - 1.00mm pitch vertical



### SPECIFICATIONS

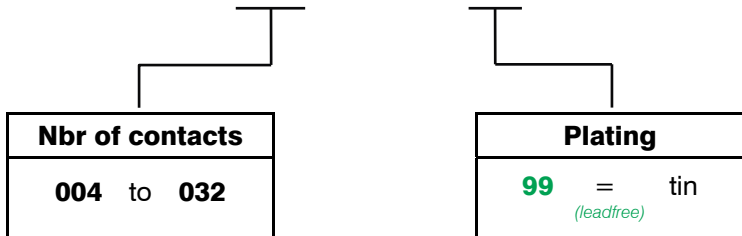
Current rating	0.5 A max.	Operating temperature	- 40°C to +105°C
Insulator resistance	100 MΩ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	20 mΩ max.	Contact plating	Tin (leadfree)
Withstanding voltage	500 V AC/1 Min.	Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	6.50	5.20	012	14.50	13.20	020	22.50	21.20	028	30.50	29.20
005	7.50	6.20	013	15.50	14.20	021	23.50	22.20	029	31.50	30.20
006	8.50	7.20	014	16.50	15.20	022	24.50	23.20	030	32.50	31.20
007	9.50	8.20	015	17.50	16.20	023	25.50	24.20	031	33.50	32.20
008	10.50	9.20	016	18.50	17.20	024	26.50	25.20	032	34.50	33.20
009	11.50	10.20	017	19.50	18.20	025	27.50	26.20			
010	12.50	11.20	018	20.50	19.20	026	28.50	27.20			
011	13.50	12.20	019	21.50	20.20	027	29.50	28.20			

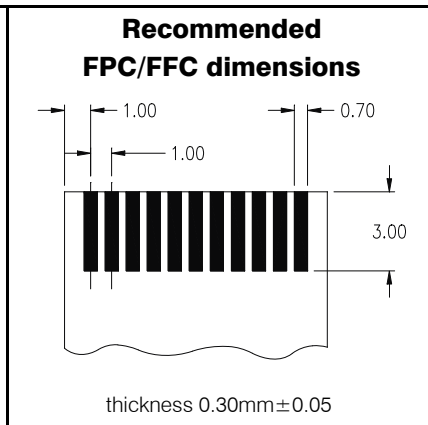
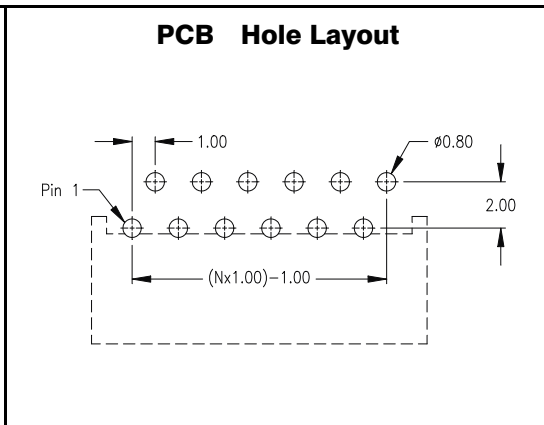
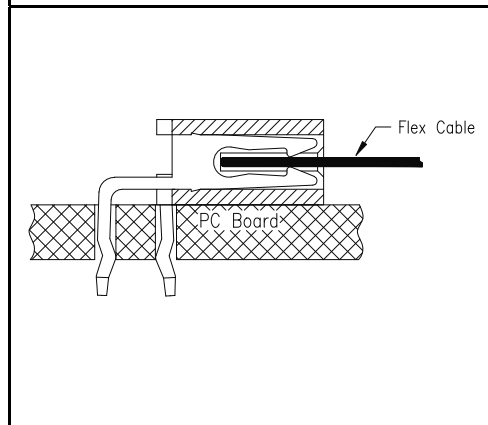
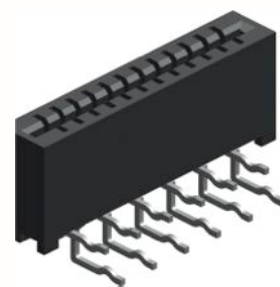
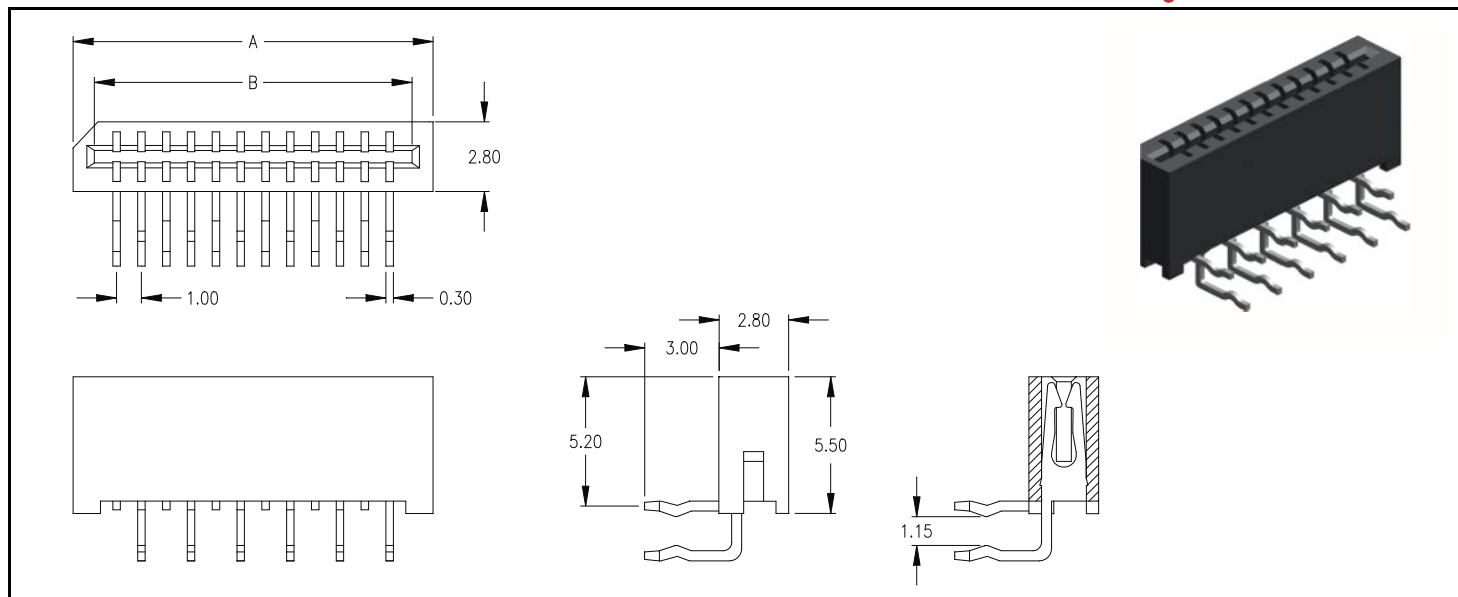
How to order

FCL - xxx - S100 - 99



# FPC/FFC Connector LIF Type

## - THT - 1.00mm pitch right angle



### SPECIFICATIONS

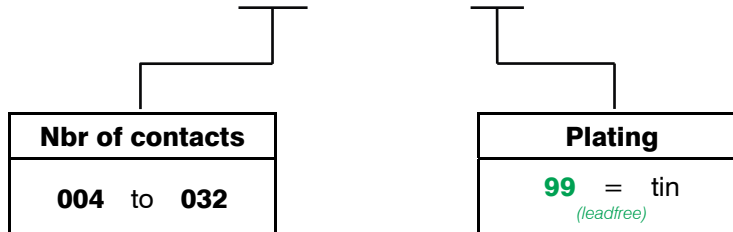
Current rating	0.5 A max.	Operating temperature	- 40°C to +105°C
Insulator resistance	100 MΩ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	20 mΩ max.	Contact plating	Tin (leadfree)
Withstanding voltage	500 V AC/1 Min.	Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	6.50	5.20	012	14.50	13.20	020	22.50	21.20	028	30.50	29.20
005	7.50	6.20	013	15.50	14.20	021	23.50	22.20	029	31.50	30.20
006	8.50	7.20	014	16.50	15.20	022	24.50	23.20	030	32.50	31.20
007	9.50	8.20	015	17.50	16.20	023	25.50	24.20	031	33.50	32.20
008	10.50	9.20	016	18.50	17.20	024	26.50	25.20	032	34.50	33.20
009	11.50	10.20	017	19.50	18.20	025	27.50	26.20			
010	12.50	11.20	018	20.50	19.20	026	28.50	27.20			
011	13.50	12.20	019	21.50	20.20	027	29.50	28.20			

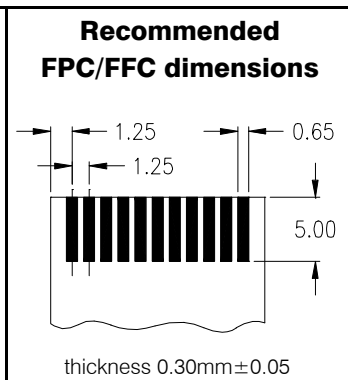
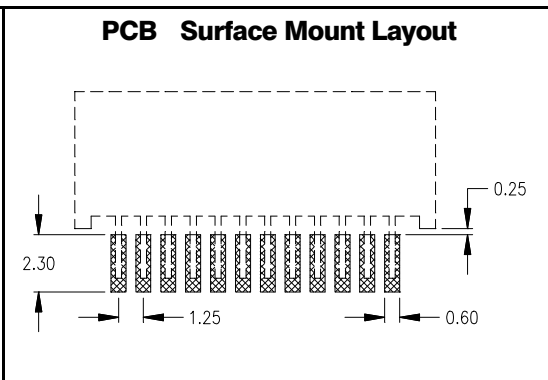
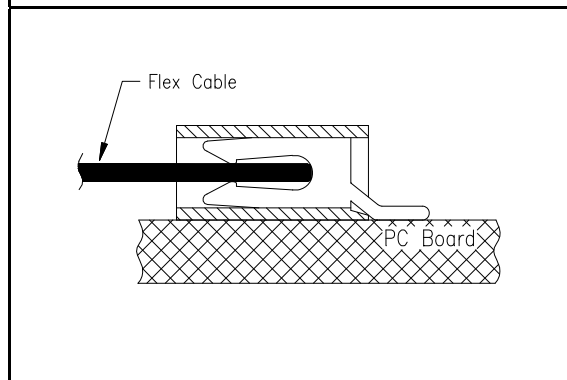
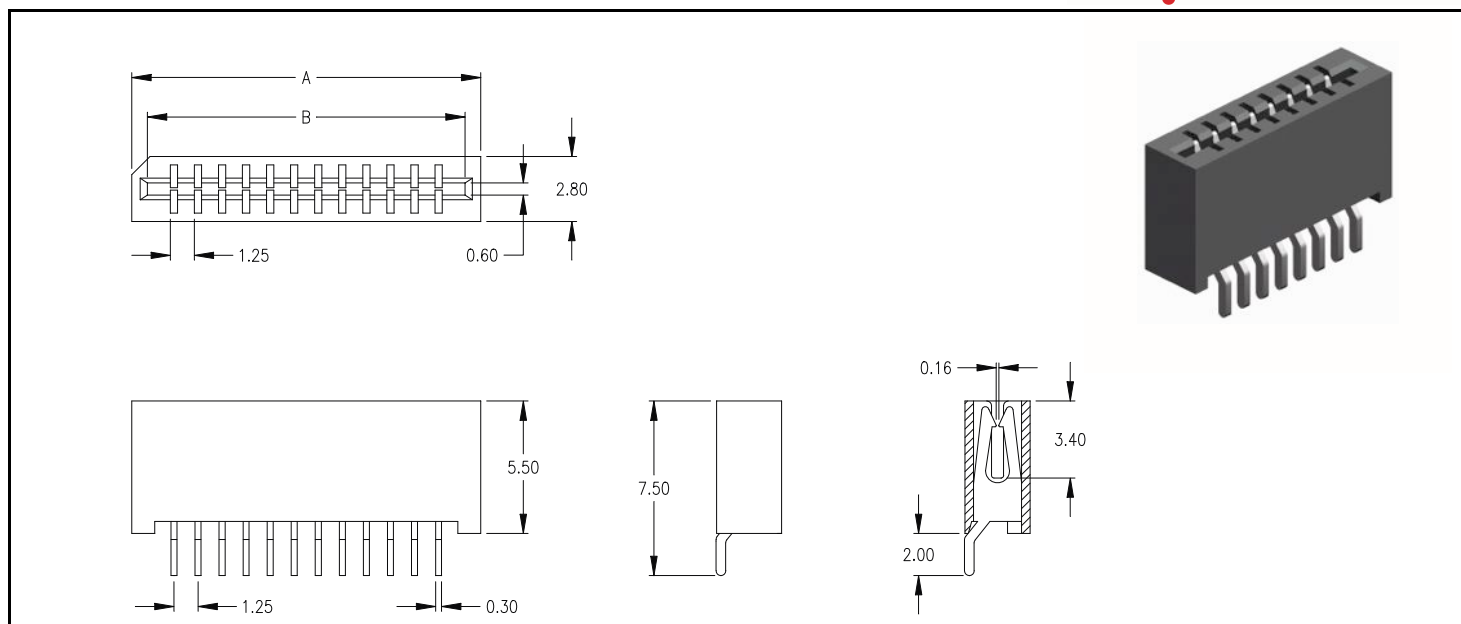
### How to order

FCL - xxx - R100 - 99



# FPC/FFC Connector LIF Type

## - SMT - 1.25mm pitch horizontal



### SPECIFICATIONS

Current rating 1 A max.  
 Insulator resistance 500 MΩ min.  
 Contact resistance 20 mΩ max.  
 Withstanding voltage 500 V AC/1 Min.

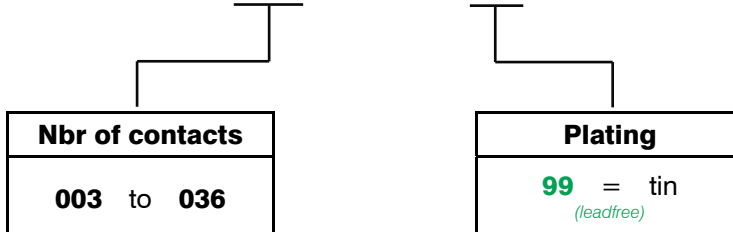
Operating temperature - 40°C to +105°C  
 Processing temperature +250°C +0/-5°C for 3sec.  
 Contact material (RoHS compliant) Phosphor Bronze  
 Contact plating Tin (leadfree)  
 Insulator material (RoHS compliant) Nylon (black) UL 94 V-0

### Dimensions (mm)

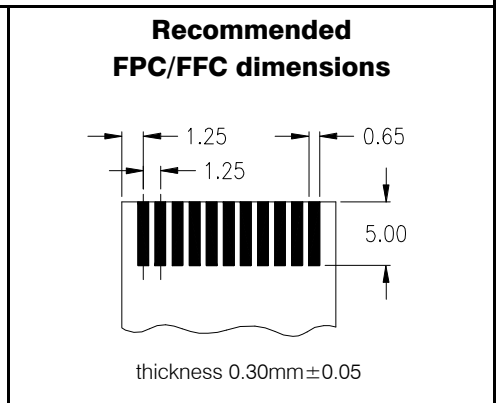
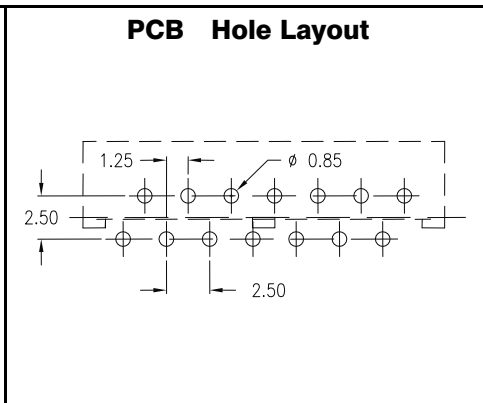
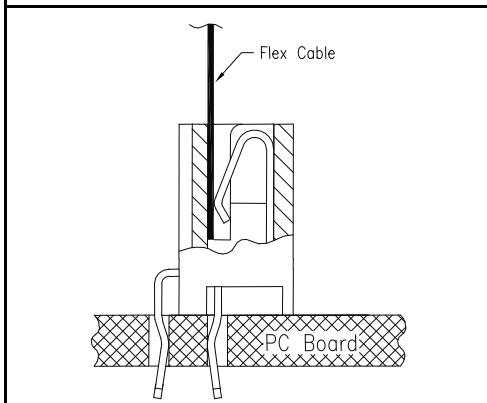
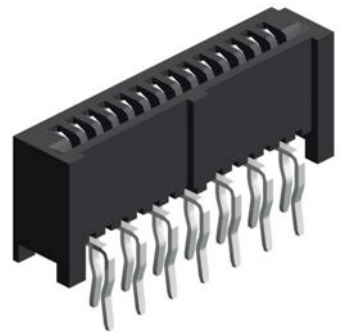
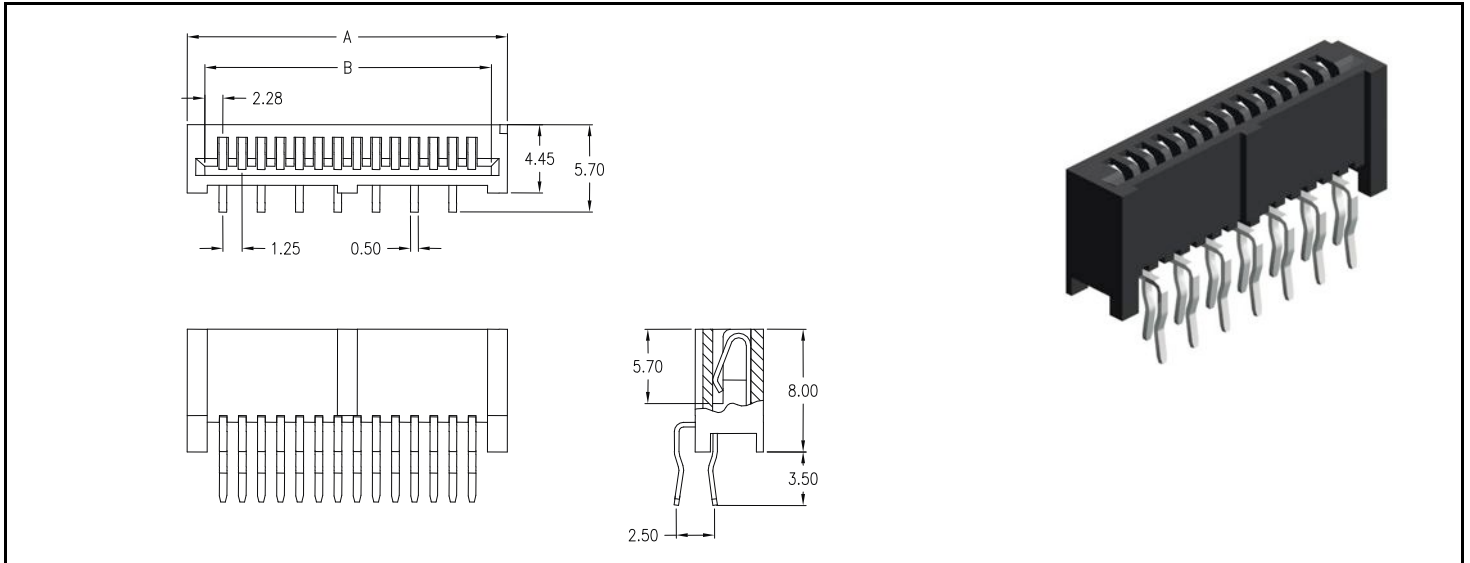
Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	7.15	5.05	012	18.40	16.30	021	29.65	27.55	030	40.90	38.80
004	8.40	6.30	013	19.65	17.55	022	30.90	28.80	031	42.15	40.05
005	9.65	7.55	014	20.90	18.80	023	32.15	30.05	032	43.40	41.30
006	10.90	8.80	015	22.15	20.05	024	33.40	31.30	033	44.65	42.55
007	12.15	10.05	016	23.40	21.30	025	34.65	32.55	034	45.90	43.80
008	13.40	11.30	017	24.65	22.55	026	35.90	33.80	035	47.15	45.05
009	14.65	12.55	018	25.90	23.80	027	37.15	35.05	036	48.40	46.30
010	15.90	13.80	019	27.15	25.05	028	38.40	36.30			
011	17.50	15.05	020	28.40	26.30	029	39.65	37.55			

### How to order

FCL - xxx - H125 - 99



FPC/FFC Connector LIF Type  
 - THT - 1.25mm pitch vertical



**SPECIFICATIONS**

Current rating	1 A max.	Operating temperature	- 40° to +105°C
Insulator resistance	500 M $\Omega$ min.	Contact material	(RoHS compliant) Phosphor Bronze
Contact resistance	20 m $\Omega$ max.	Contact plating	Tin (leadfree)
Withstanding voltage	500 V AC/1 Min.	Insulator material	(RoHS compliant) Nylon (black) UL 94 V-0

**Dimensions (mm)**

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	7.15	5.10	011	17.15	15.10	019	27.15	25.10	027	37.15	35.10
004	8.40	6.35	012	18.40	16.35	020	28.40	26.35	028	38.40	36.35
005	9.65	7.60	013	19.65	17.60	021	29.65	27.60	029	39.65	37.60
006	10.90	8.85	014	20.90	18.85	022	30.90	28.85	030	40.90	38.85
007	12.15	10.10	015	22.15	20.10	023	32.15	30.10	031	42.15	40.10
008	13.40	11.35	016	23.40	21.35	024	33.40	31.35	032	43.40	41.35
009	14.65	12.60	017	24.65	22.60	025	34.65	32.60	033	44.65	42.60
010	15.90	13.85	018	25.90	23.85	026	35.90	33.85			

How to order

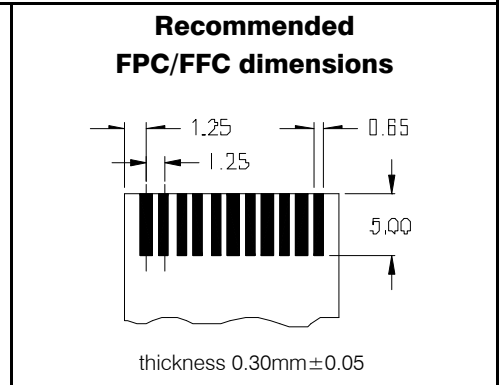
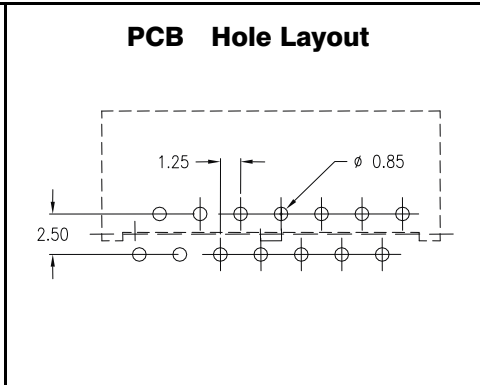
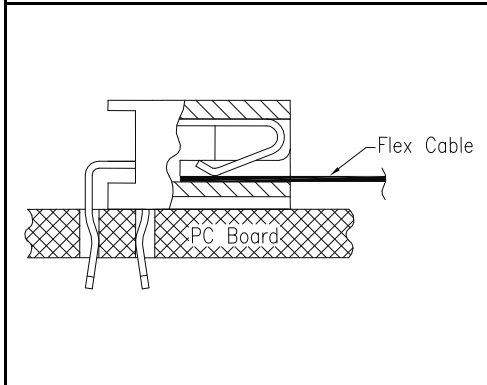
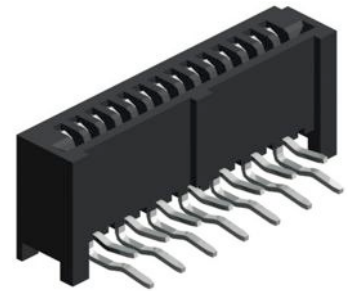
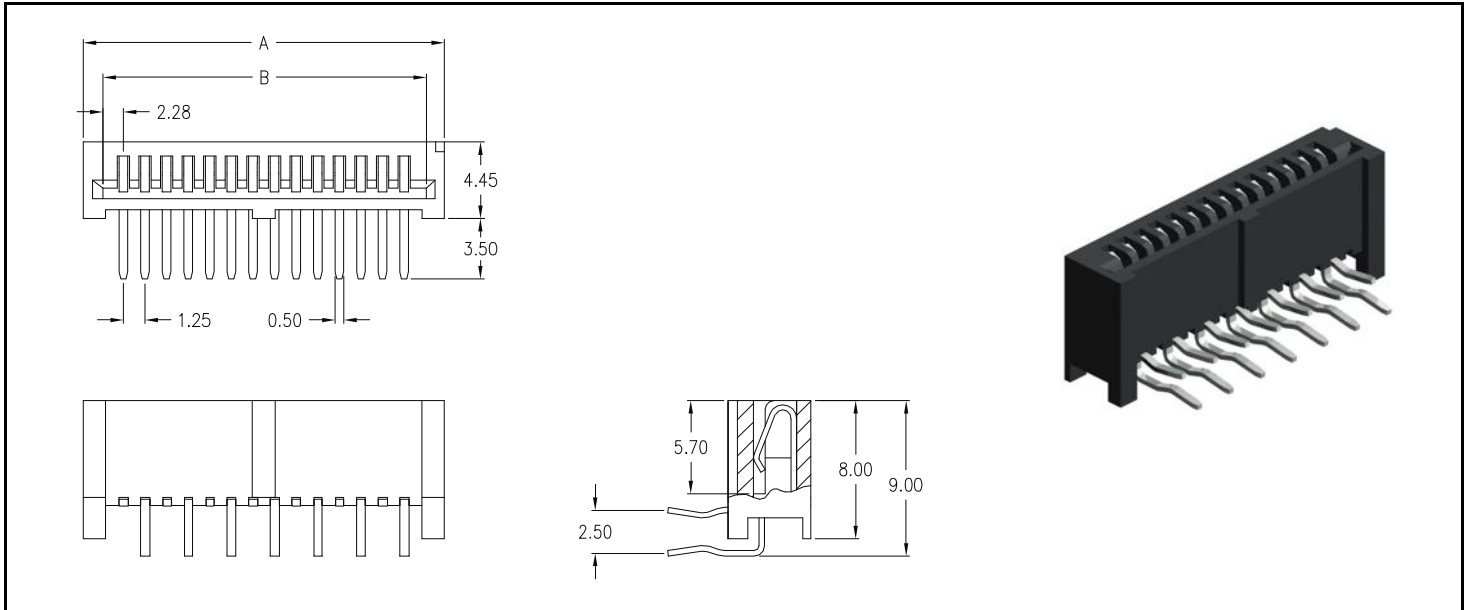
FCL - xxx - S125 - 99

**Nbr of contacts**  
 003 to 033

**Plating**  
 99 = tin  
 (leadfree)



FPC/FFC Connector LIF Type  
 - THT - 1.25mm pitch right angle



**SPECIFICATIONS**

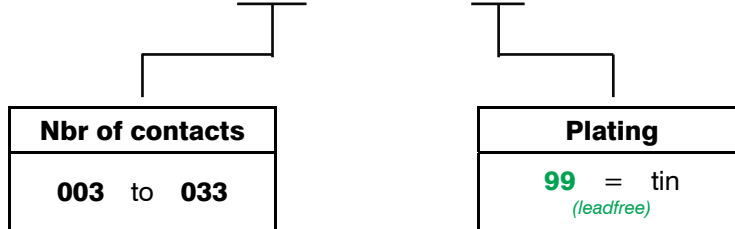
Current rating	1 A max.	Operating temperature	- 40° to +105°C
Insulator resistance	500 MΩ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	20 mΩ max.	Contact plating	Tin (leadfree)
Withstanding voltage	500 V AC/1 Min.	Insulator material	Nylon (black) UL 94 V-0 (RoHS compliant)

**Dimensions (mm)**

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	7.15	5.10	011	17.15	15.10	019	27.15	25.10	027	37.15	35.10
004	8.40	6.35	012	18.40	16.35	020	28.40	26.35	028	38.40	36.35
005	9.65	7.60	013	19.65	17.60	021	29.65	27.60	029	39.65	37.60
006	10.90	8.85	014	20.90	18.85	022	33.90	28.85	030	40.90	38.85
007	12.15	10.10	015	22.15	20.10	023	32.15	30.10	031	42.15	40.10
008	13.40	11.35	016	23.40	21.35	024	33.40	31.35	032	43.40	41.35
009	14.65	12.60	017	24.65	22.60	025	34.65	32.60	033	44.65	42.60
010	15.90	13.85	018	25.90	23.85	026	35.90	33.85			

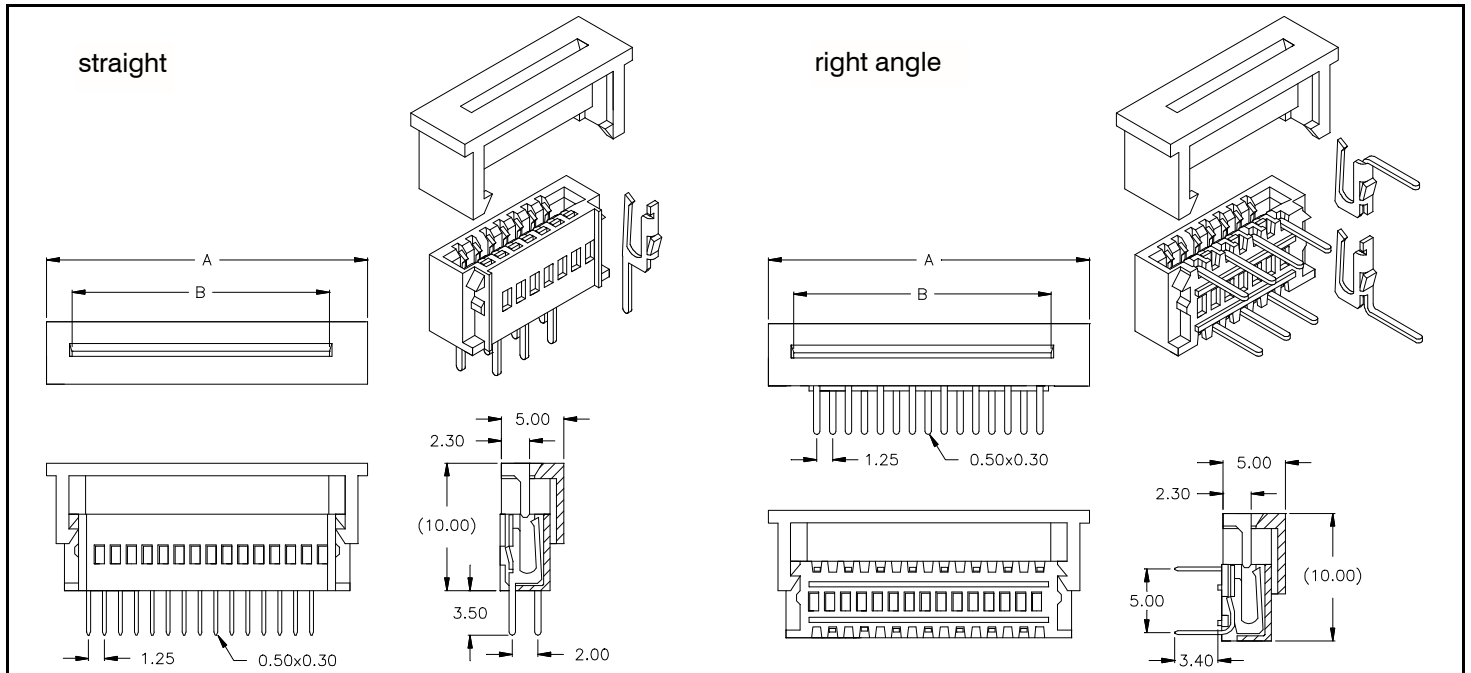
How to order

FCL - xxx - R125 - 99

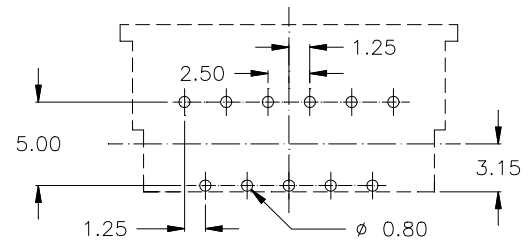
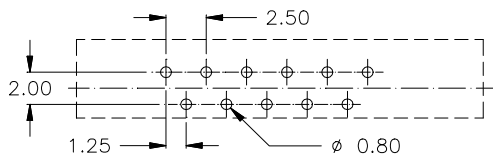


# FPC/FFC Connector ZIF Type

- THT - 1.25mm pitch straight & right angle



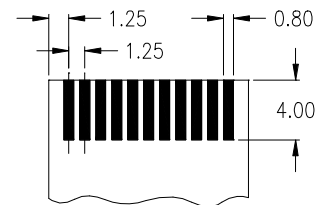
## PCB Hole Layout



## SPECIFICATIONS

Current rating	1 A max.
Insulator resistance	500 MΩ min.
Contact resistance	20 mΩ max.
Withstanding voltage	500 V AC/1 Min.
Operating temperature	-20°C to +85°C
Contact material	Phosphor Bronze (RoHS compliant)
Contact plating	Tin (leadfree)
Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)

## Recommended FPC/FFC dimensions



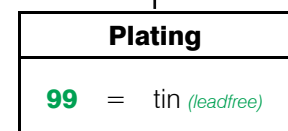
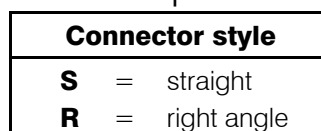
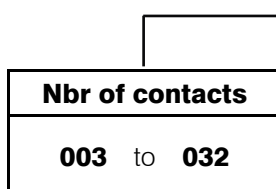
thickness 0.30mm±0.05

## Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
003	9.55	5.20	011	19.55	15.20	019	29.55	25.20	027	39.55	35.20
004	10.80	6.45	012	20.80	16.45	020	30.80	26.45	028	40.80	36.45
005	12.05	7.70	013	22.05	17.70	021	32.05	27.70	029	42.05	37.70
006	13.30	8.95	014	23.30	18.95	022	33.30	28.95	030	43.30	38.95
007	14.55	10.20	015	24.55	20.20	023	34.55	30.20	031	44.55	40.20
008	15.80	11.45	016	25.80	21.45	024	35.80	31.45	032	45.80	41.45
009	17.05	12.70	017	27.05	22.70	025	37.05	32.70			
010	18.30	13.95	018	28.30	23.95	026	38.30	33.95			

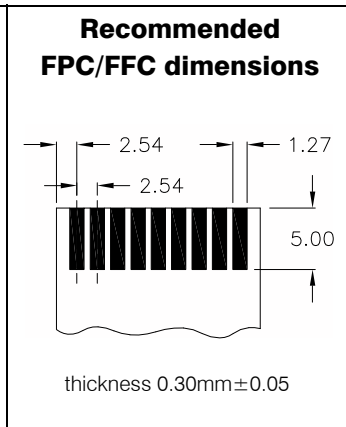
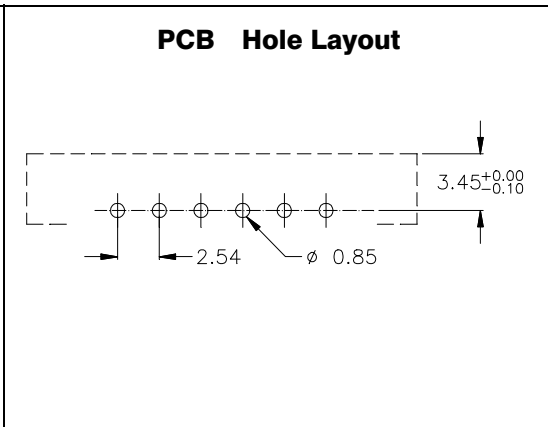
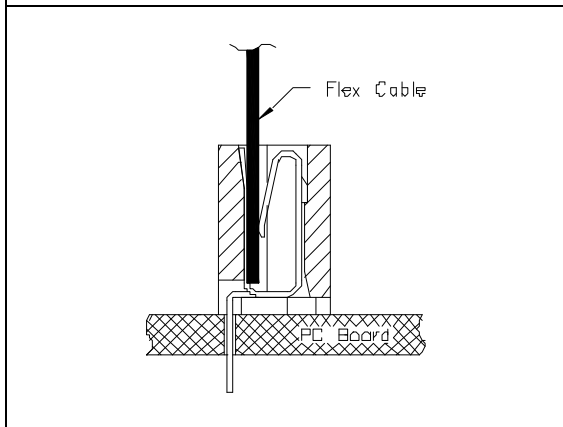
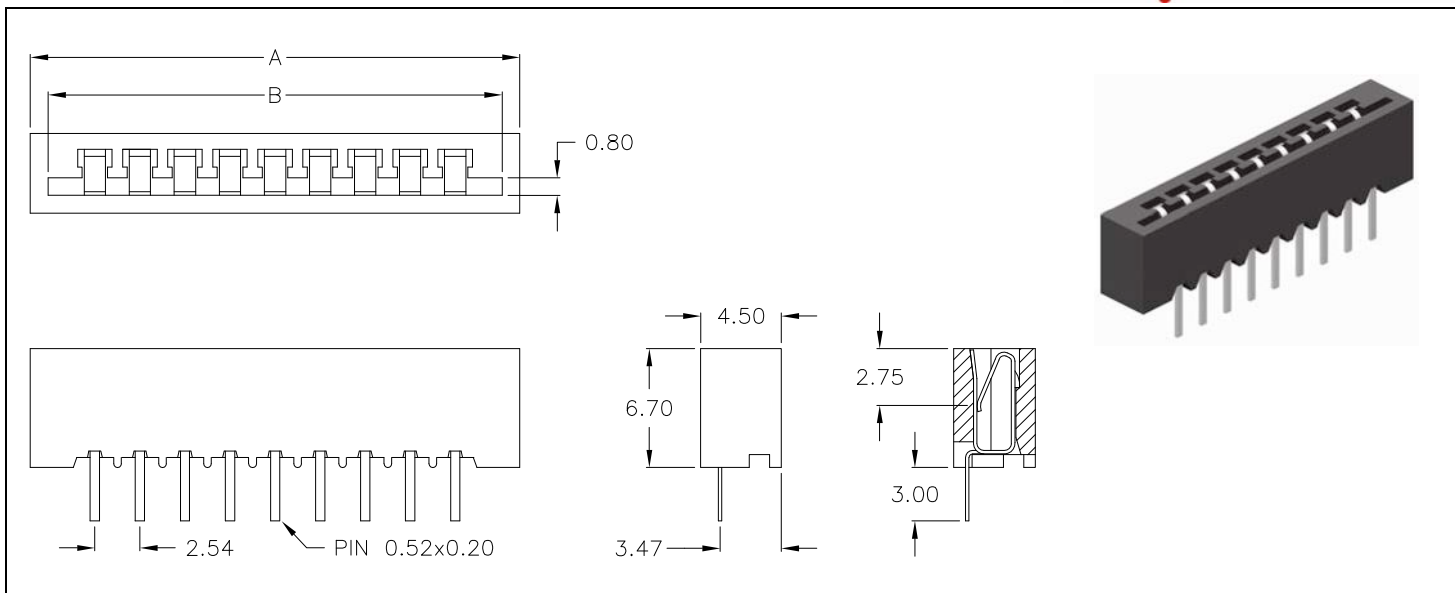
## How to order

FCZ - xxx - X 125 - 99



# FPC/FFC Connector LIF Type

## - THT - 2.54mm pitch vertical



### SPECIFICATIONS

Current rating	1 A max.	Operating temperature	- 55°C to +85°C
Insulator resistance	1000 MΩ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	25 mΩ max.	Contact plating	Tin (leadfree)
Withstanding voltage	500 V AC	Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
002	10.54	8.43	009	28.32	26.21	016	46.10	43.99	023	63.88	61.77
003	13.08	10.97	010	30.86	28.75	017	48.64	46.53	024	66.42	64.31
004	15.62	13.51	011	33.40	31.29	018	51.18	49.07	025	68.96	66.85
005	18.16	16.05	012	35.94	33.83	019	53.72	51.60	026	71.50	69.39
006	20.70	18.59	013	38.48	36.37	020	56.26	54.15			
007	23.24	21.13	014	41.02	38.91	021	58.80	56.69			
008	25.78	23.67	015	43.56	41.45	022	61.34	59.23			

How to order

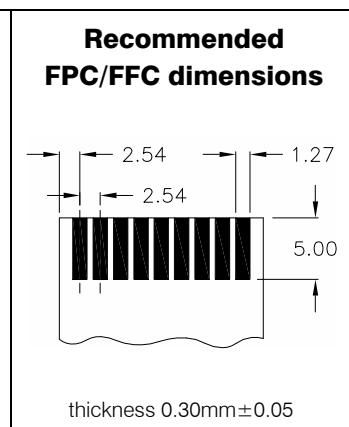
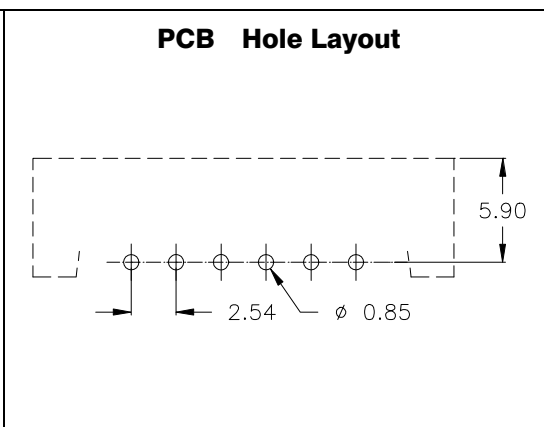
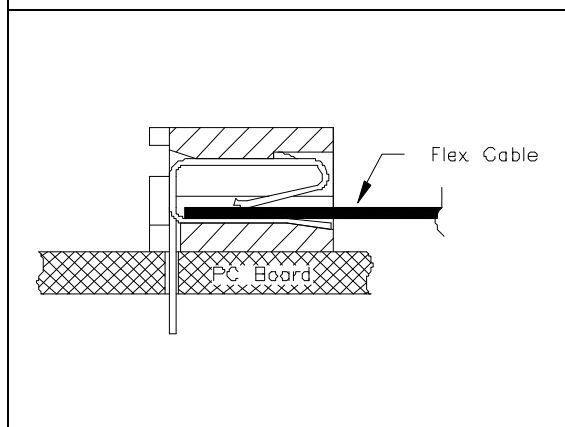
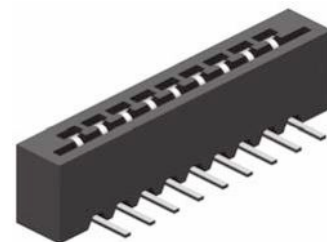
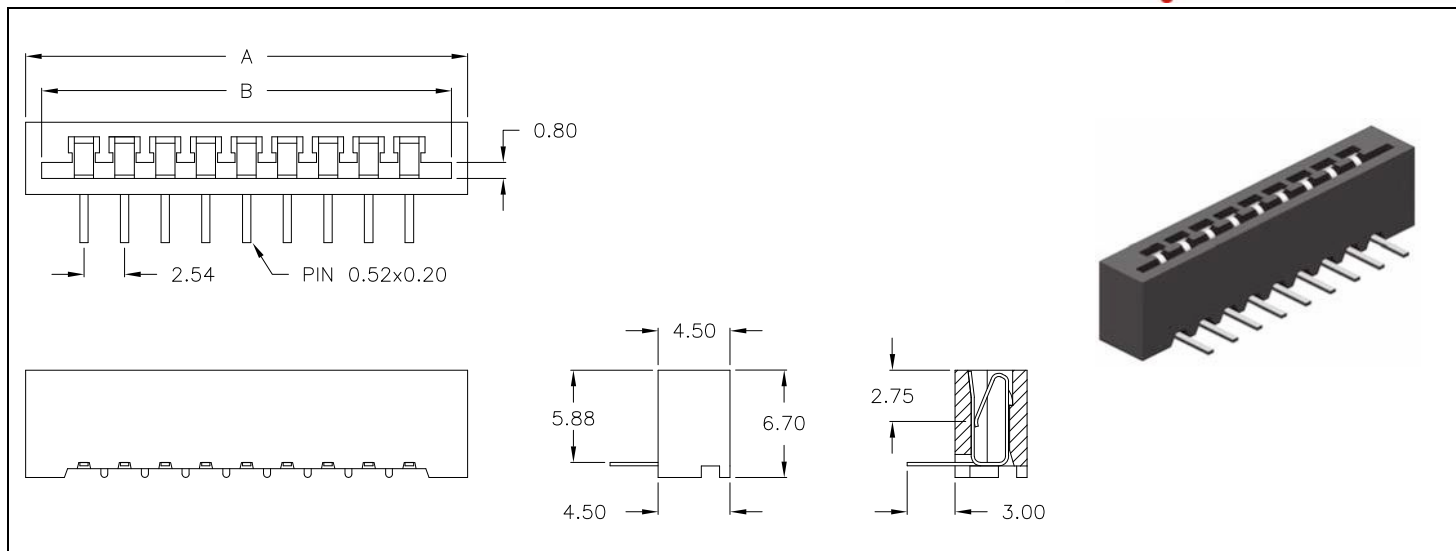
FPC - xxx - S254 - 99

**Nbr of contacts**  
002 to 026

**Plating**  
99 = tin (leadfree)

# FPC/FFC Connector LIF Type

## - THT - 2.54mm pitch right angle



### SPECIFICATIONS

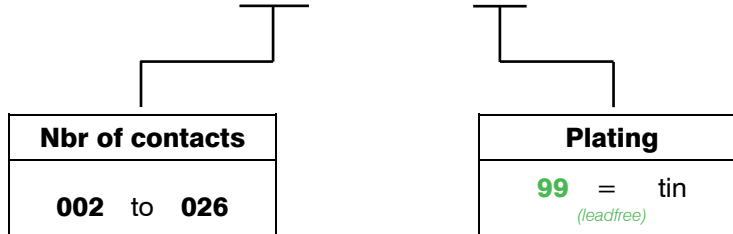
Current rating	1 A max.	Operating temperature	-55°C to +85°C
Insulator resistance	1000 M $\Omega$ min.	Contact material	Phosphor Bronze (RoHS compliant)
Contact resistance	25 m $\Omega$ max.	Contact plating	Tin (leadfree)
Withstanding voltage	500 V AC	Insulator material	P.B.T. UL 94 V-0 (RoHS compliant)

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
002	10.54	8.43	009	28.32	26.21	016	46.10	43.99	023	63.88	61.77
003	13.08	10.97	010	30.86	28.75	017	48.64	46.53	024	66.42	64.31
004	15.62	13.51	011	33.40	31.29	018	51.18	49.07	025	68.96	66.85
005	18.16	16.05	012	35.94	33.83	019	53.72	51.60	026	71.50	69.39
006	20.70	18.59	013	38.48	36.37	020	56.26	54.15			
007	23.24	21.13	014	41.02	38.91	021	58.80	56.69			
008	25.78	23.67	015	43.56	41.45	022	61.34	59.23			

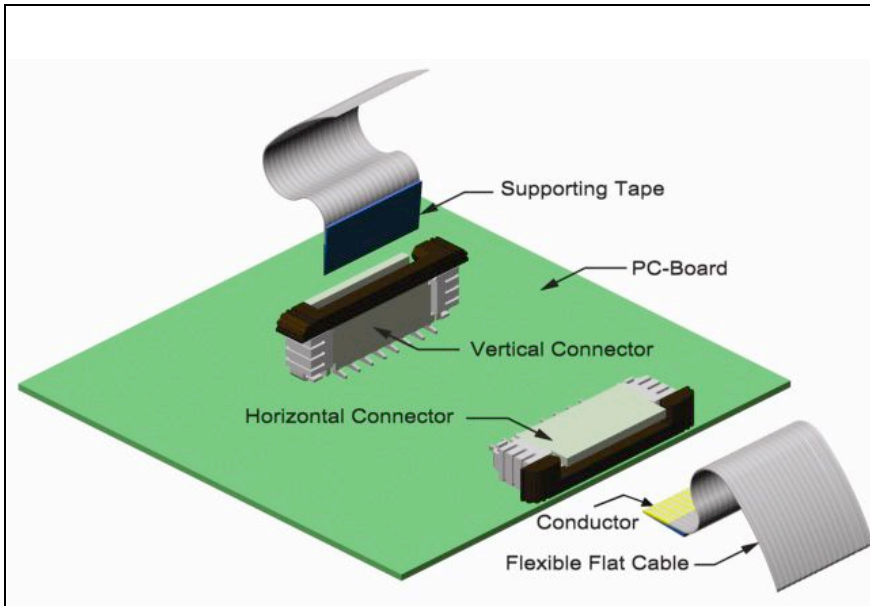
### How to order

FPC - xxx - R254 - 99



# Flex Cable

0.50mm to 2.54mm pitch



## SPECIFICATIONS

Conductor resistance	according to JIS C-C3102 (@ 20°C)
Insulation resistance	> 1000 MΩ/m @ 500 V DC
Dielectric strength	500 V, 0.5Ma / 1 Minute
Operating temperature	-40°C to ~ +80°C
Flame Test	UL Sub, 758 VW-1

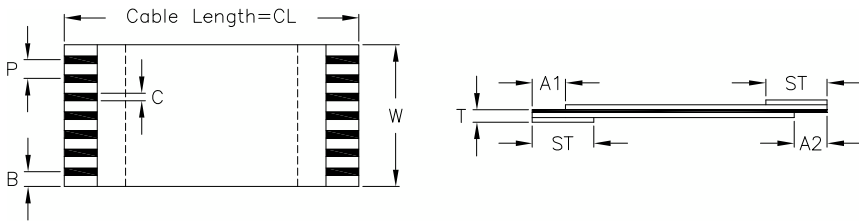
### Flexing Test

- A) Bending angle: 180°, R=Cable thickness ≥ 20 cycles
- B) 10mmR, 70 cycle/Min., 25mm Reciprocate ≥ 100.000 cycles

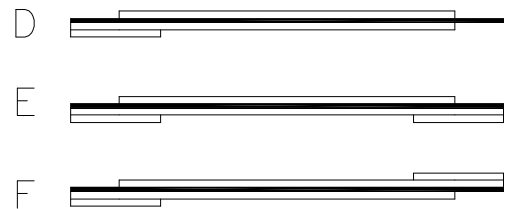
### Abrasion Test

ø5.0mm, 600g, 60 cycle/Min. ≥ 10.000 cycles

## Dimensions



## Cable Type

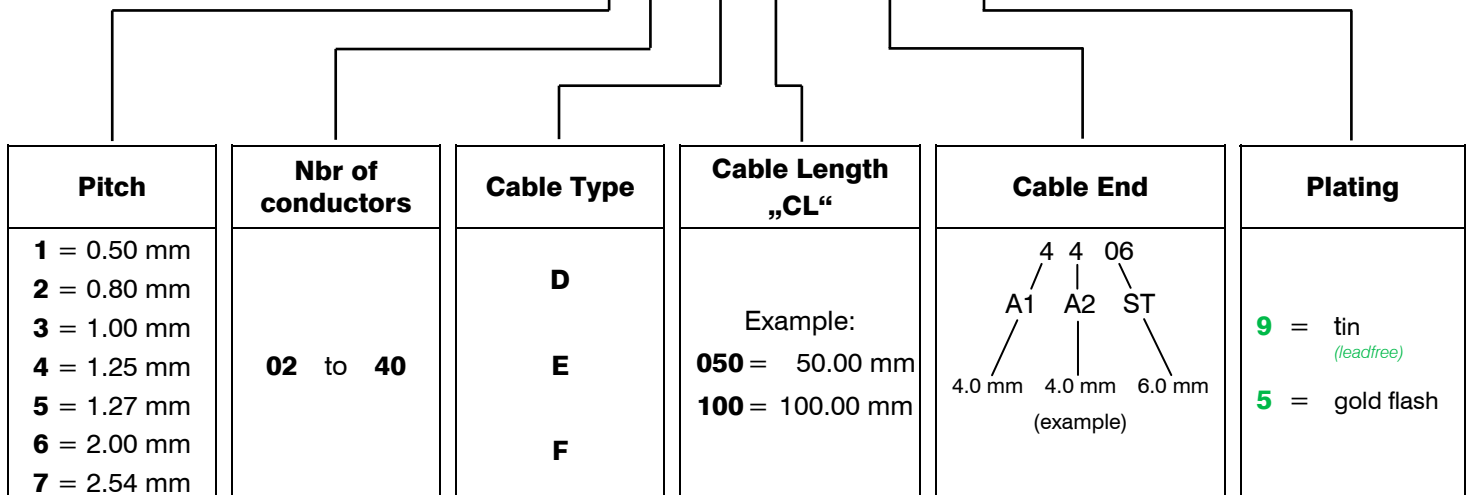


	"P" (Pitch)	"C"	"B"	"W"	"CL"	"T"	"A1"	"A2"	"ST"
Range	0.50 - 2.54	0.30 - 0.80	same as "P"	P×(n+1)	20.00 min.	0.30	3.00 - 6.00	3.00 - 6.00	6.00 - 15.00
Tolerance	±0.05	±0.05	±0.15	±0.10	see <b>Note</b>	±0.05	±1.00	±1.00	±2.00

**Note :** 20 - 100mm ±2.00mm      101 - 200mm ±3.00mm      201 - 300mm ±4.00mm      301mm ↑ ±5.00mm

## How to order

FCA - x xx - X xxx - 4406 - x



# ZIF Test Sockets for Flex Cable

0.50mm to 2.54mm pitch



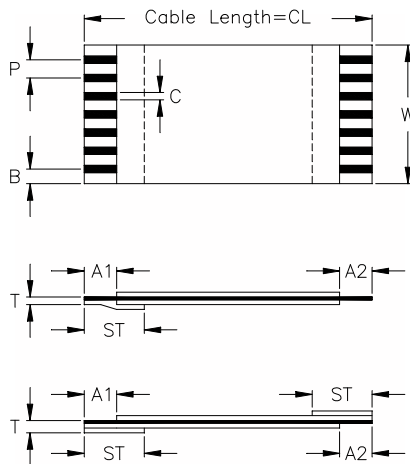
**High cycle ZIF Test Sockets for any kind and pitch of Flex-Cable.**

**Handles up to 10K cycles with simple open/close ClamShell type retention frame.**

### Cable Dimensions

In order to be able to offer the correct socket for your cable, we need to know the type of cable you are using and the corresponding dimensions as shown below.

**Please send the datasheet of your cable together with your socket request.**



### SPECIFICATIONS

#### Mechanical data

Contact life  
Retention System life  
Solderability  
Individual contact force

10.000 cycles min.  
10.000 cycles min.  
as per IEC 60068-2-58  
40 grams max.

#### Material

Insulator (RoHS compliant)  
Terminal (RoHS compliant)  
Spring (RoHS compliant)

High temp plastic or epoxy FR4  
Brass  
BeCu

#### Electrical data

Contact resistance  
Current rating  
Insulation resistance at 500V DC  
Breakdown voltage at 60 Hz  
Capacitance  
Inductance

< 100 mΩ  
500 mA max.  
100 MΩ if 0.50 to 0.80mm pitch  
500 MΩ 1.00mm pitch upwards  
500V min.  
< 1 pF  
< 2 nH

#### Operating temperature

-55°C to +125°C

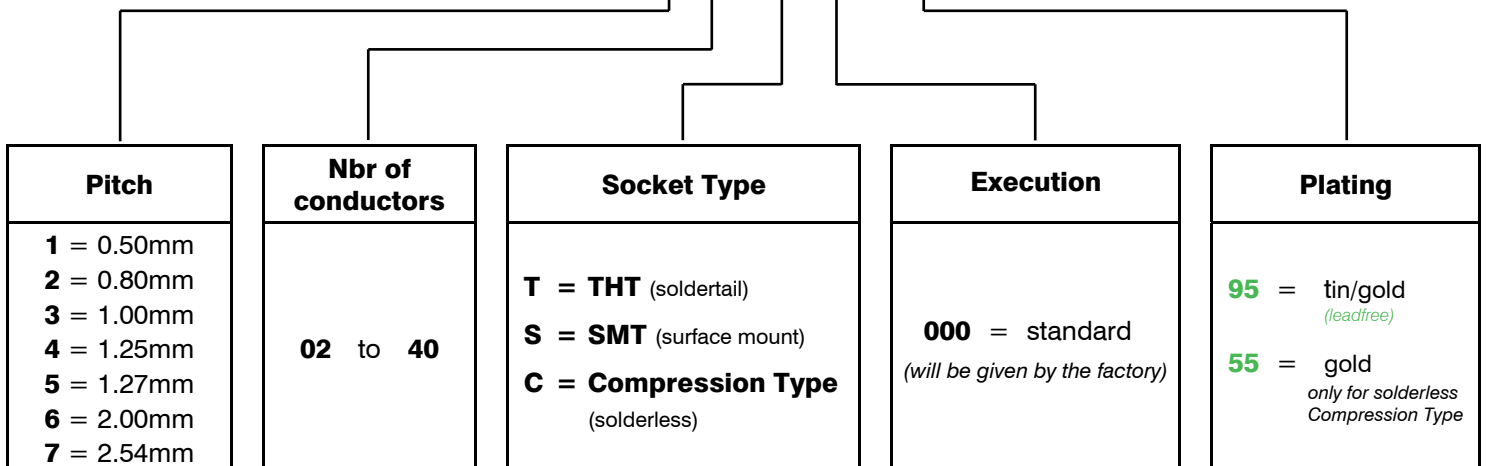
#### Processing temperature

260°C for 60sec.

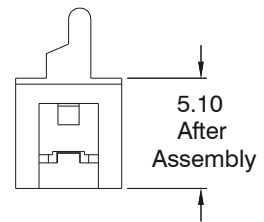
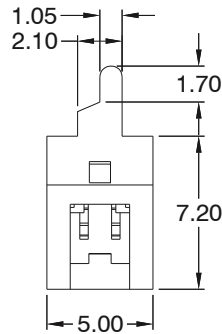
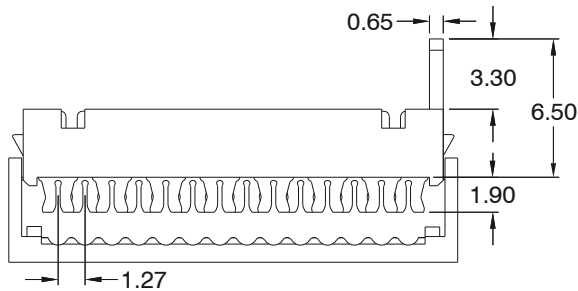
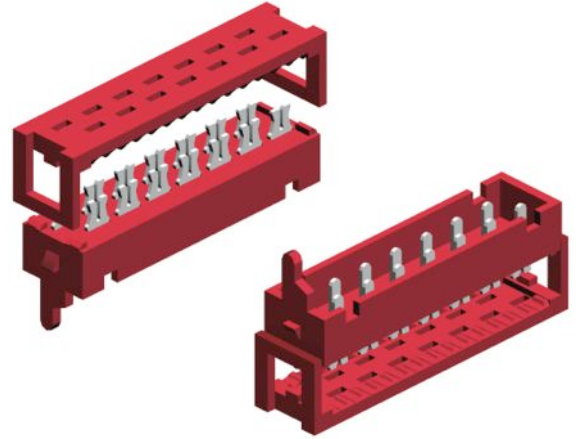
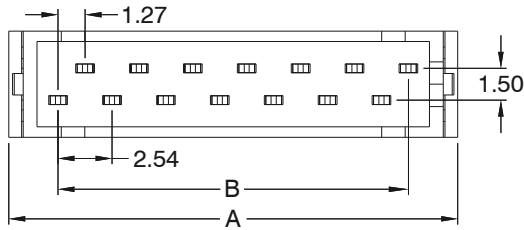
**A detailed socket drawing with the required PCB layout dimensions will be submitted by E-tec for each project.**

How to order

**FCT - x xx - X xxx - xx**



Mini – Flex Connector  
 IDC pitch 1,27mm shrouded male



**SPECIFICATIONS**

Current rating	1.5 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Insulator material	P.B.T. (red) UL 94 V-0
Contact material	Phosphor Bronze

**RIBBON CABLE RECOMMENDATION**

Cable Type	Ribbon UL Style 2651
Spacing	1.27 mm
Wire range	stranded 0.08-0.09 mm <sup>2</sup> AWG28 solid Ø 0.30
Insulation Diameter	0.90 mm

**Dimensions (mm)**

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	8.45	3.81	012	18.61	13.97	020	28.77	24.13
006	10.99	6.35	014	21.15	16.51			
008	13.53	8.89	016	23.69	19.05			
010	16.07	11.43	018	26.23	21.59			

**How to order**

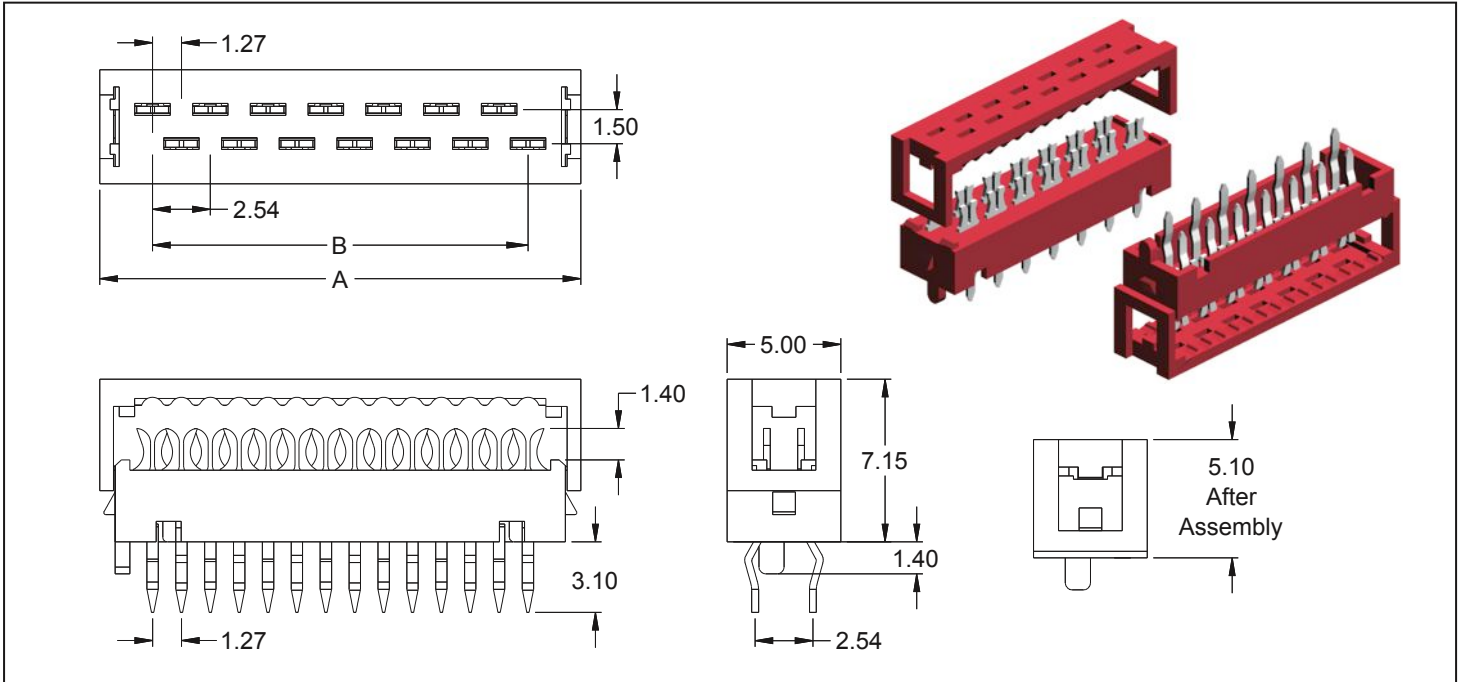
MFM - xxx - DC50 - 99

<b>Nbr of contacts</b>
004; 006; 008; 010 012; 014; 016; 018 020

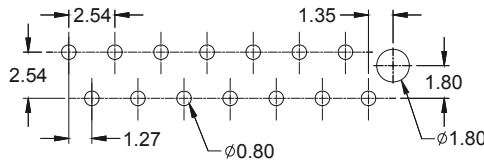
<b>Plating</b>
99 = Tin
Other platings on request

# Mini – Flex Connector

## IDC pitch 1,27mm - THT - Plug



### PCB Hole Layout



### SPECIFICATIONS

Current rating	1.5 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Insulator material	P.B.T. (red) UL 94 V-0
Contact material	Phosphor Bronze

### RIBBON CABLE RECOMMENDATION

Cable Type	Ribbon UL Style 2651
Spacing	1.27 mm
Wire range	stranded 0.08-0.09 mm <sup>2</sup> AWG28 solid Ø 0.30
Insulation Diameter	0.90 mm

### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	8.45	3.81	012	18.61	13.97	020	28.77	24.13
006	10.99	6.35	014	21.15	16.51			
008	13.53	8.89	016	23.69	19.05			
010	16.07	11.43	018	26.23	21.59			

### How to order

MFP - xxx - DC50 - 99

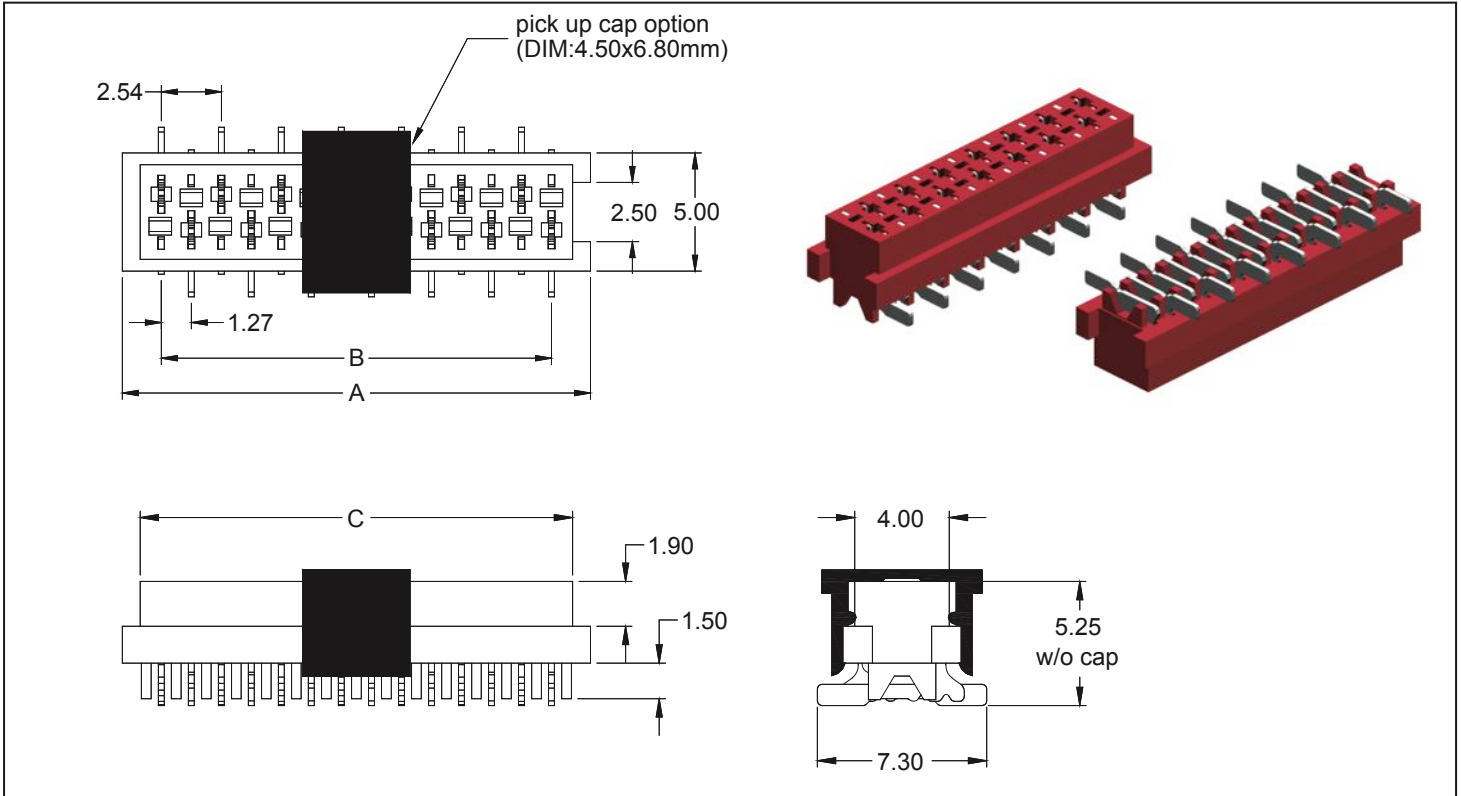
Nbr of contacts
004; 006; 008; 010 012; 014; 016; 018 020

Plating
99 = Tin
Other platings on request



# Mini - Mate Connector

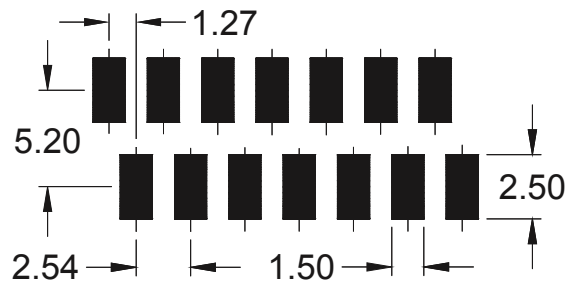
## - SMT - female Block Shape



### SPECIFICATIONS

Current rating	1 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Processing temperature	+260°C +0/-5°C for 5sec.
Preheating	150°C±10°C/1~2 Min.
Insulator material	Nylon 46 (red) UL 94 V-0
Contact material	Phosphor Bronze

### PCB Surface Mount Layout



### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"
004	7.00	3.81	5.60	012	17.16	13.97	15.76	020	27.32	24.13	25.92
006	9.54	6.35	8.14	014	19.70	16.51	18.30				
008	12.08	8.89	10.68	016	22.24	19.05	20.84				
010	14.62	11.43	13.22	018	24.78	21.59	23.38				

### How to order

MMF - xxx - HB50 - 99 / X

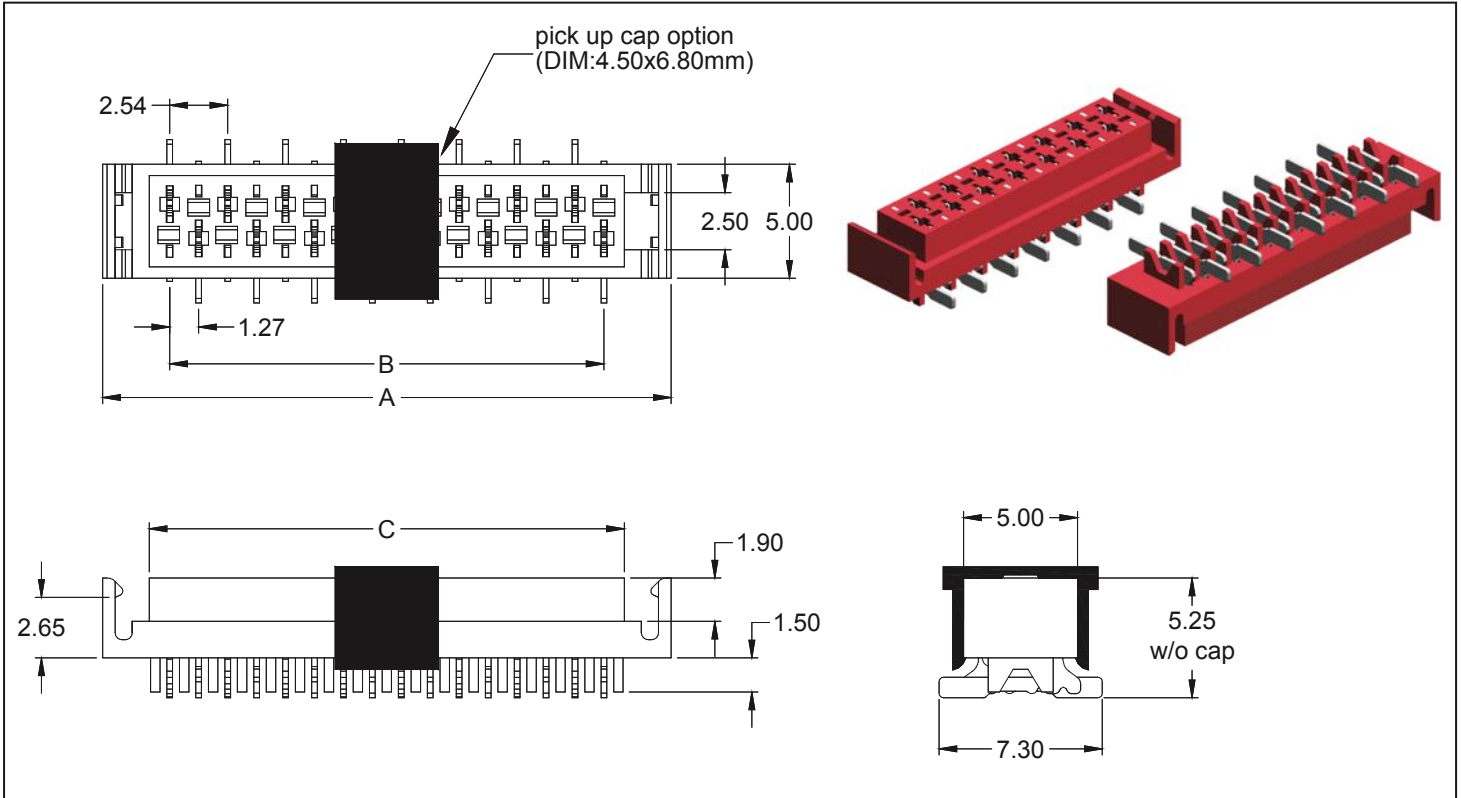
Nbr of contacts
004; 006; 008; 010 012; 014; 016; 018 020

Plating
99 = Tin
Other platings on request

Option
A = tube packing; with pick & place pad
B = reel packing; with pick & place pad
T = tube packing; without pick & place pad

# Mini - Mate Connector

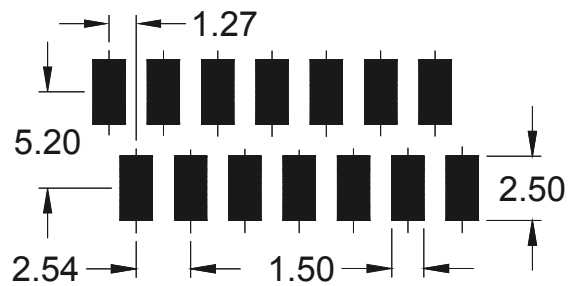
## - SMT - female Latch Shape



### SPECIFICATIONS

Current rating	1 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Processing temperature	+260°C +0/-5°C for 5sec.
Preheating	150°C±10°C/1~2 Min.
Insulator material	Nylon 46 (red) UL 94 V-0
Contact material	Phosphor Bronze

### PCB Surface Mount Layout



### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"
004	9.70	3.81	5.60	012	19.86	13.97	15.76	020	30.02	24.13	25.92
006	12.24	6.35	8.14	014	22.40	16.51	18.30				
008	14.78	8.89	10.68	016	24.94	19.05	20.84				
010	17.32	11.43	13.22	018	27.48	21.59	23.38				

### How to order

MMF - xxx - HL50 - 99 / X

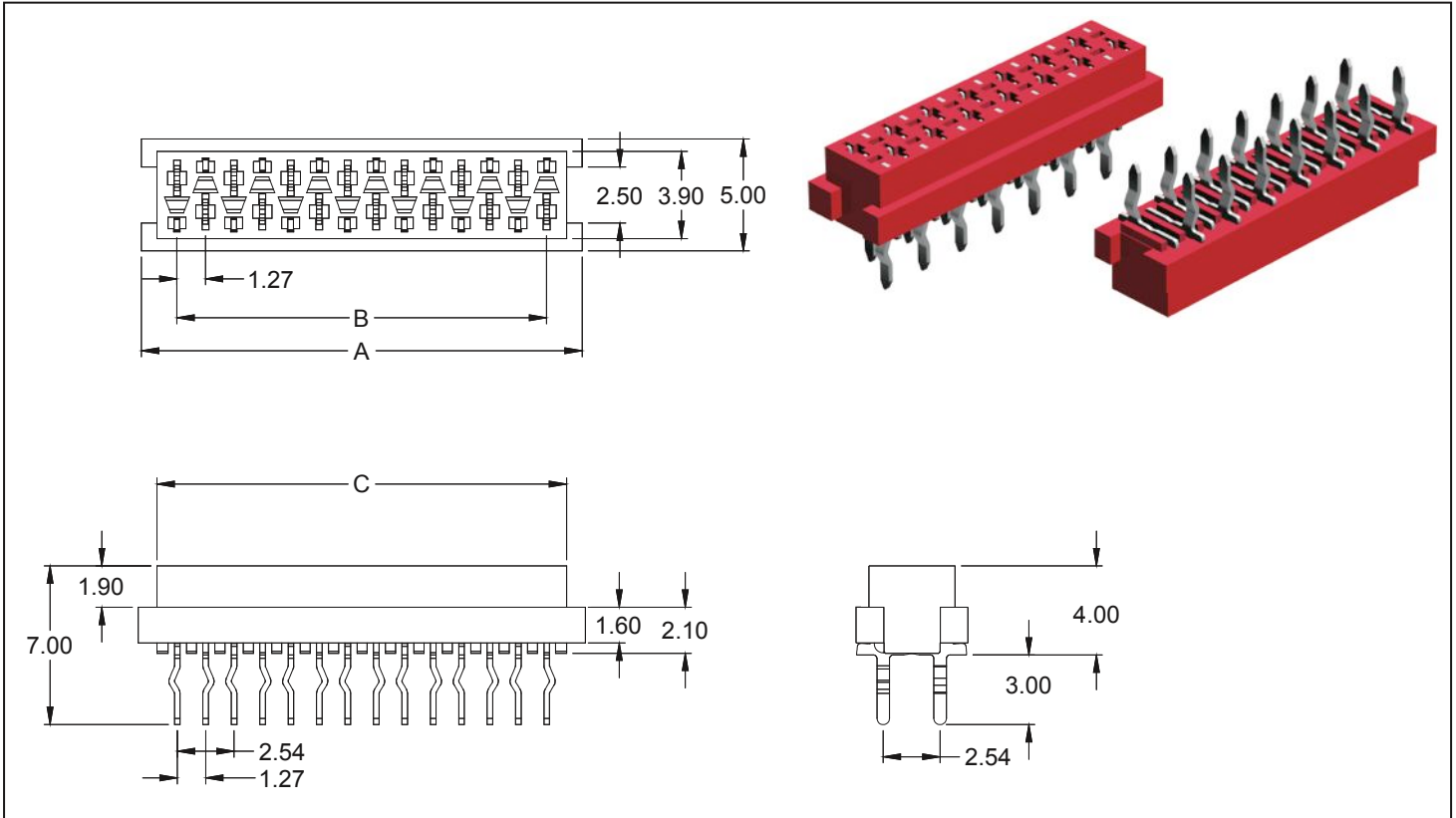
Nbr of contacts
004; 006; 008; 010 012; 014; 016; 018 020

Plating
99 = Tin
Other platings on request

Option
A = tube packing; with pick & place pad
B = reel packing; with pick & place pad
T = tube packing; without pick & place pad

# Mini - Mate Connector

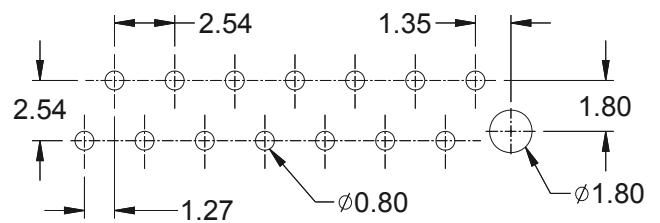
## - THT - straight female Block Shape



### SPECIFICATIONS

Current rating	1 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Insulator material	Nylon 46 (red) UL 94 V-0
Contact material	Phosphor Bronze

### PCB Hole Layout



### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"
004	7.00	3.81	5.60	012	17.16	13.97	15.76	020	27.32	24.13	25.92
006	9.54	6.35	8.14	014	19.70	16.51	18.30				
008	12.08	8.89	10.68	016	22.24	19.05	20.84				
010	14.62	11.43	13.22	018	24.78	21.59	23.38				

### How to order

MMF - xxx - SB50 - 99

#### Nbr of contacts

004; 006; 008; 010  
012; 014; 016; 018  
020

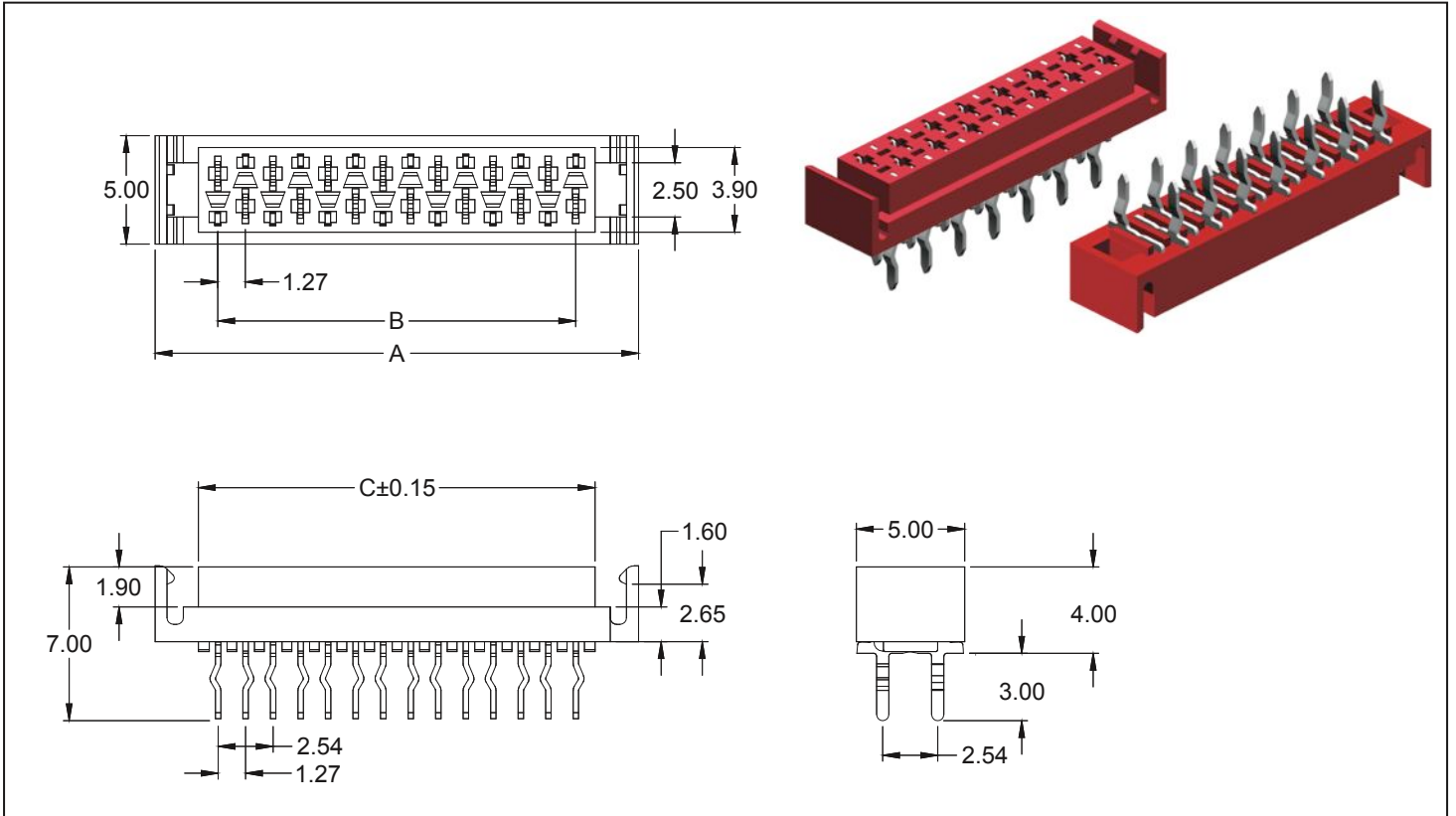
#### Plating

99 = Tin

Other platings on request

# Mini - Mate Connector

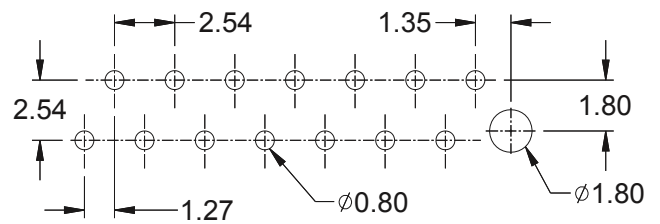
## - THT - straight female Latch Shape



### SPECIFICATIONS

Current rating	1 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Insulator material	Nylon 46 (red) UL 94 V-0
Contact material	Phosphor Bronze

### PCB Hole Layout



### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"
004	9.70	3.81	5.60	012	19.86	13.97	15.76	020	30.02	24.13	25.92
006	12.24	6.35	8.14	014	22.40	16.51	18.30				
008	14.78	8.89	10.68	016	24.94	19.05	20.84				
010	17.32	11.43	13.22	018	27.48	21.59	23.38				

### How to order

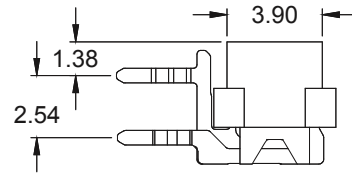
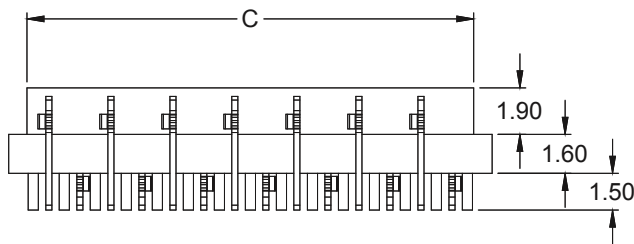
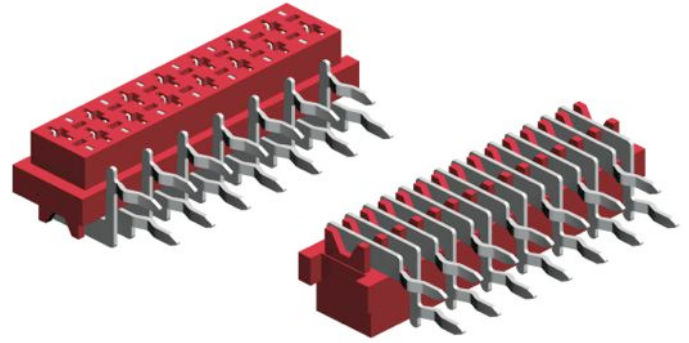
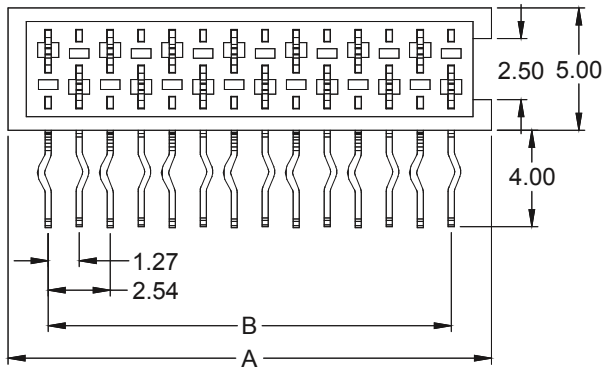
MMF - xxx - SL50 - 99

Nbr of contacts
004; 006; 008; 010 012; 014; 016; 018 020

Plating
99 = Tin
Other platings on request

# Mini - Mate Connector

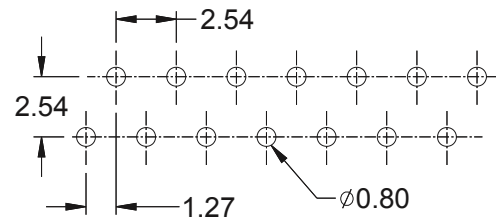
## - THT - right angle female Block Shape



### SPECIFICATIONS

Current rating	1 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Insulator material	Nylon 46 (red) UL 94 V-0
Contact material	Phosphor Bronze

### PCB Hole Layout



### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"	Contacts	DIM "A"	DIM "B"	DIM "C"
004	7.00	3.81	5.60	012	17.16	13.97	15.76	020	27.32	24.13	25.92
006	9.54	6.35	8.14	014	19.70	16.51	18.30				
008	12.08	8.89	10.68	016	22.24	19.05	20.84				
010	14.62	11.43	13.22	018	24.78	21.59	23.38				

### How to order

MMF - xxx - RB50 - 99

#### Nbr of contacts

004; 006; 008; 010  
012; 014; 016; 018  
020

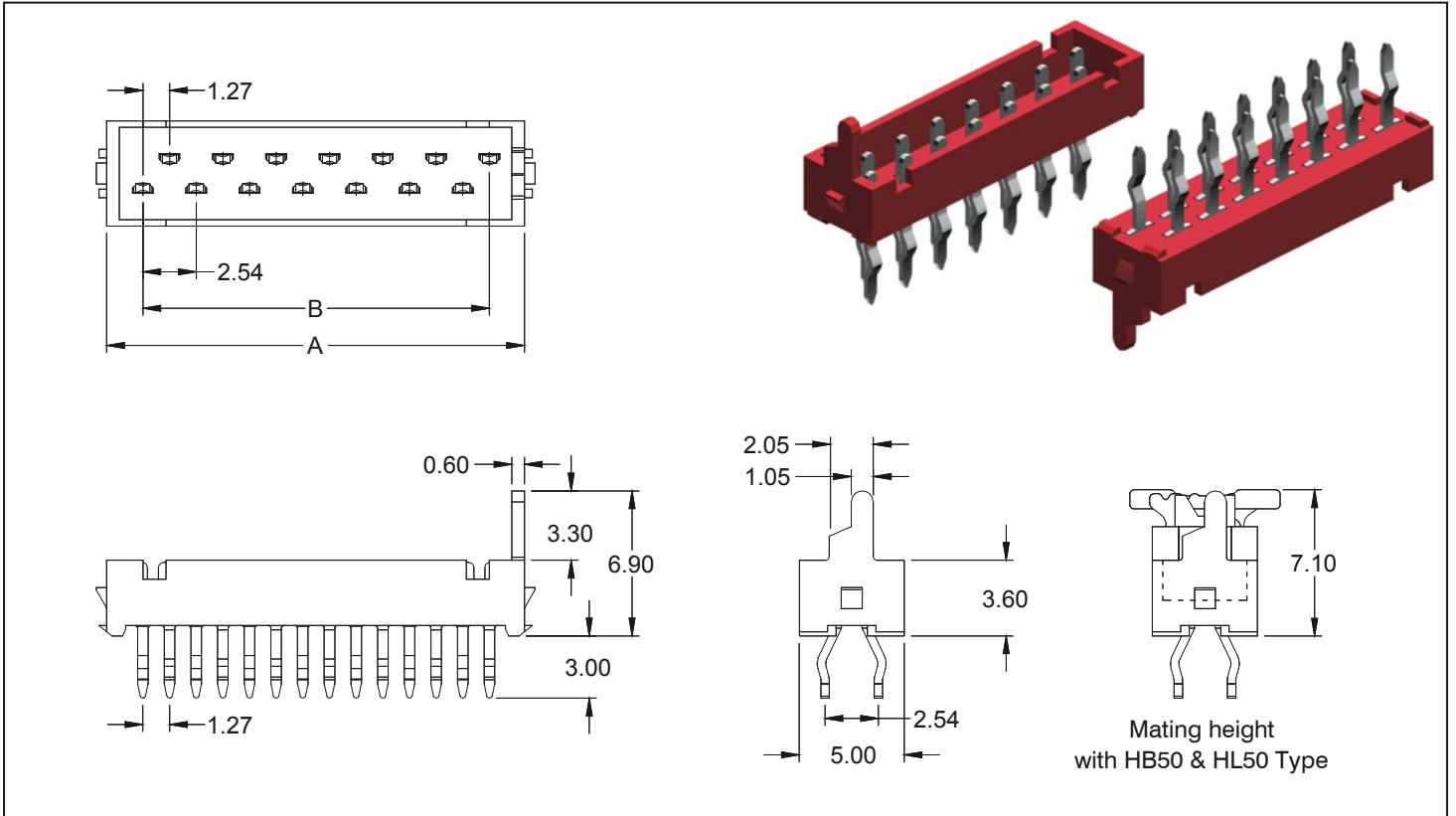
#### Plating

99 = Tin

Other platings on request

# Mini - Mate Connector

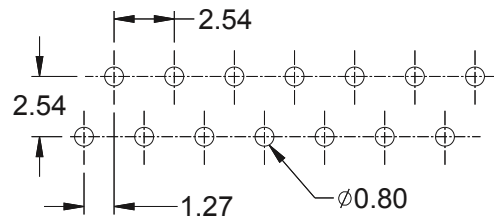
## - THT - straight male Shrouded



### SPECIFICATIONS

Current rating	1 A
Nominal rating	230 V
Contact resistance	10 mΩ max.
Insulator resistance	1000 MΩ min.
Withstanding voltage	500 V AC
Operating temperature	-40°C to +105°C
Insulator material	P.B.T. (red) UL 94 V-0
Contact material	Phosphor Bronze

### PCB Hole Layout



### Dimensions (mm)

Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"	Contacts	DIM "A"	DIM "B"
004	7.20	3.81	012	17.36	13.97	020	27.52	24.13
006	9.74	6.35	014	19.90	16.51			
008	12.28	8.89	016	22.44	19.05			
010	14.82	11.43	018	24.98	21.59			

### How to order

MMM - xxx - SS50 - 99

Nbr of contacts
004; 006; 008; 010 012; 014; 016; 018 020

Plating
99 = Tin
Other platings on request

## Fully Shrouded

<p><b>L - Type</b> female plug (AWG 28 to 32)</p> <p>Order Code housing: <b>CRF-1xx-L100</b>      Contact: <b>CRF-999-L100-99</b></p>	<p><b>SL - Type</b> -SMT- male (side entry)</p> <p>Order Code: <b>CRR-1xx-SL100-99/X</b></p>
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## Fully Shrouded

<p><b>SL - Type</b> -SMT- male (top entry)</p> <p>Order Code: <b>CRS-1xx-SL100-99/R</b></p>	
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## SPECIFICATIONS

Current rating	1 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	500 MΩ min.	Withstanding voltage	500 V AC	Insulator material	Nylon UL 94 V-0
Voltage rating	50 V AC max.	Operating temp.	-25°C to +85°C	PCB Thickness	1.60 mm (.063")

## How to order

**CR X - x xx - X 100 - 99 / X**

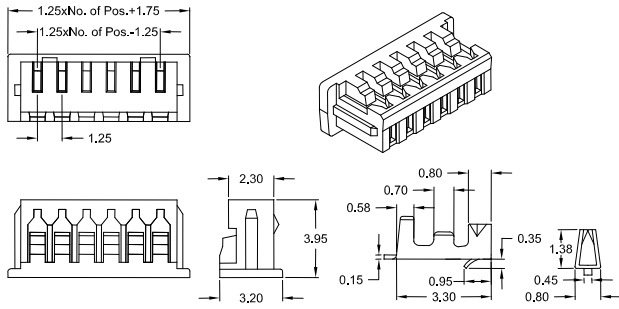
<b>Type</b>	<b>Rows</b>	<b>Nbr of contacts</b>	<b>Execution</b>	<b>Plating</b>	<b>Option</b>
<b>F</b> = Female <b>R</b> = R/A male <b>S</b> = Straight male	<b>1</b> = single row <b>9</b> = loose contacts	<b>02 - 20</b> = L, SL - type <b>99</b> = loose contacts MOQ: 10K / reel	<b>L</b> = L - type <b>SL</b> = SL - type  see dwg above	<b>99</b> = Tin  Other platings on request	<b>R</b> = reel

## Shrouded Type

### S - Type

female plug

(AWG 28 to 32)

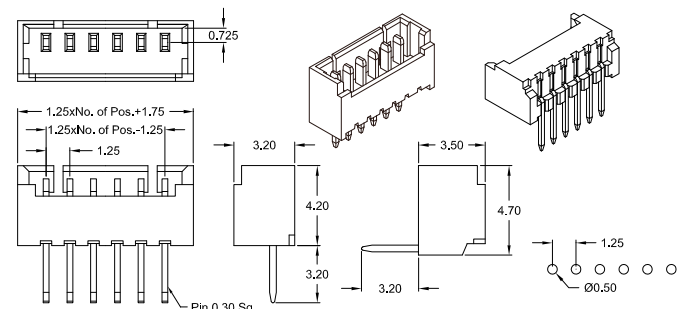


Order Code housing: CRF-1xx-S125

contact: CRF-999-S125-99

### S - Type

-THT- male



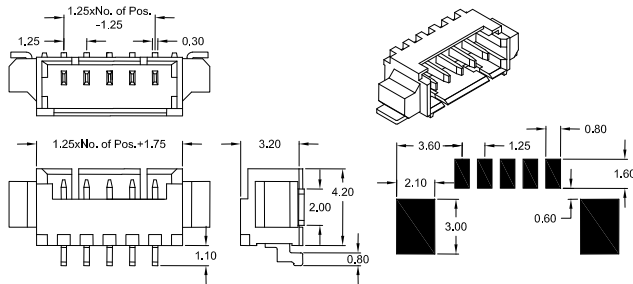
Order Code straight: CRS-1xx-S125-99

right angle: CRR-1xx-S125-99

## Shrouded Type

### SS - Type

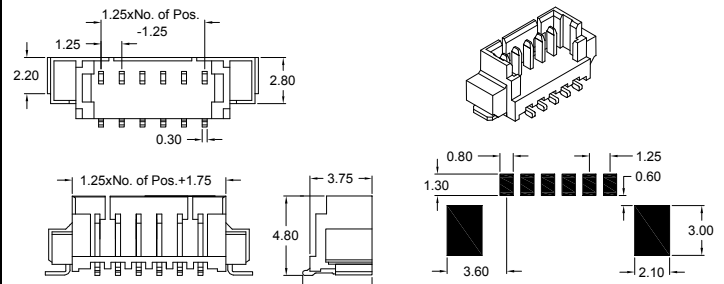
-SMT- male (side entry)



Order Code: CRR-1xx-SS125-99/R

### SS - Type

-SMT- male (top entry)



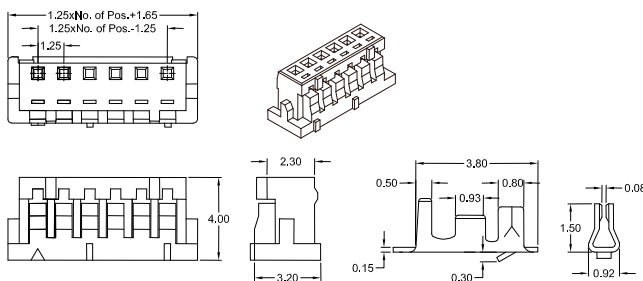
Order Code: CRS-1xx-SS125-99/R

## Shrouded Type

### G - Type

female plug

(AWG 28 to 32)

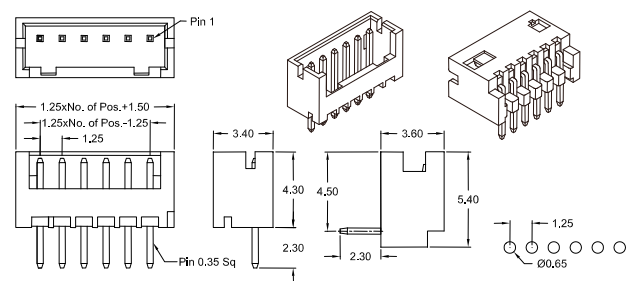


Order Code housing: CRF-1xx-G125

contact: CRF-999-G125-99

### G - Type

-THT- male



Order Code straight: CRS-1xx-G125-99

right angle: CRR-1xx-G125-99

## SPECIFICATIONS

Current rating	1 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	500 MΩ min.	Withstanding voltage	500 V AC	Insulator material	Nylon UL 94 V-0
Voltage rating	50 V AC max.	Operating temp.	-25°C to +85°C	SS125 Type	LCP UL 94 V-0
				PCB Thickness	1.60 mm (.063")

## How to order

CR X - x xx - X 125 - 99 / X

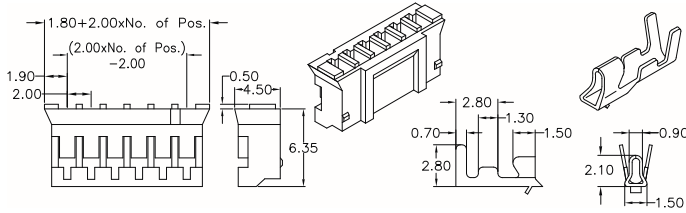


Type	Rows	Nbr of contacts	Execution	Plating	Option
<b>F</b> = Female	<b>1</b> = single row	<b>02 - 15</b> = S, SS, G - type	<b>S</b> = S - type	<b>99</b> = tin (leadfree)	<b>R</b> = Reel
<b>R</b> = R/A male	<b>9</b> = loose contacts	<b>99</b> = loose contacts MOQ: 10K / reel	<b>SS</b> = SS - type SMT male	Other platings on request	
<b>S</b> = Straight male			<b>G</b> = G - type see dwg above		



## Shrouded Type - front open plastic

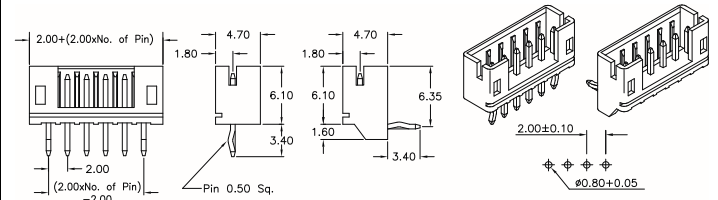
**O - Type** female plug (AWG 26 to 30)



Order Code housing: **CRF-1xx-O200**

contact: **CRF-999-O200-99**

**O - Type** -THT- male

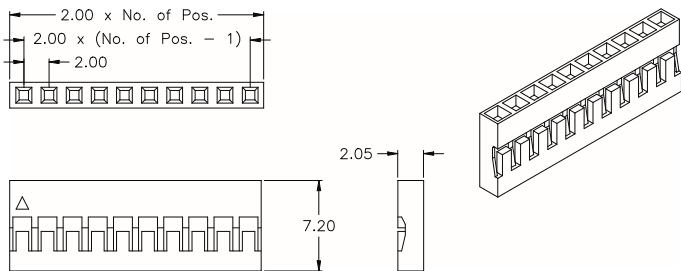


Order Code straight: **CRS-1xx-O200-99**

right angle: **CRR-1xx-O200-99**

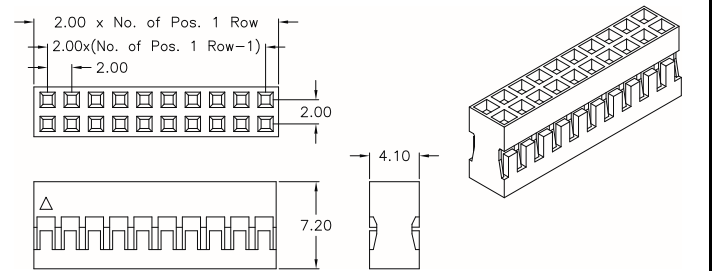
## Female Header Type

**H - Type** single row (AWG 26 to 30)



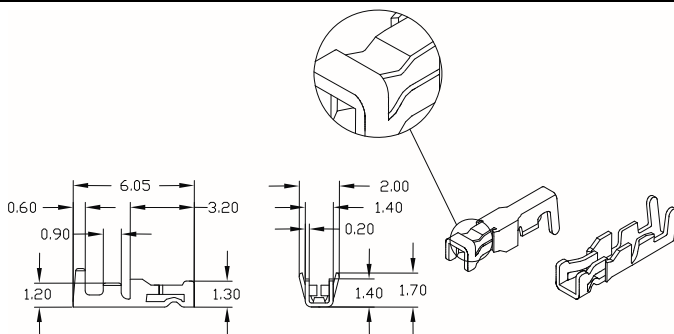
Order Code housing: **CRF-1xx-H200**

**H - Type** dual row (AWG 26 to 30)



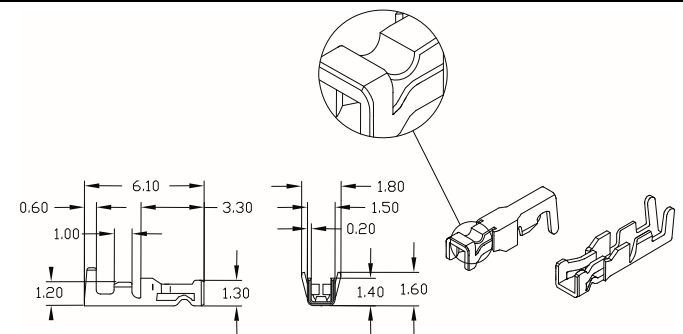
Order Code housing: **CRF-2xx-H200**

## H - Type female contact



if for single row 01-19 & dual row 04-18 contacts:

Order Code: **CRF-999L-H200-55**



if for single row 20-40 & dual row 20-80 contacts:

Order Code: **CRF-999-H200-55**

## SPECIFICATIONS

Current rating	1 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	800 V AC	Insulator material	Nylon UL 94 V-0
Voltage rating	100 V AC max.	Operating temp.	-25°C to +90°C	PCB Thickness	1.60 mm (.063")

## How to order

**CR X - x xx - X 200 - 99**

Type	Rows	Nbr of contacts	Execution	Plating
<b>F</b> = Female	<b>1</b> = single row	<b>02 - 16</b> = O - type	<b>O</b> = O - type	<b>99</b> = tin (leadfree)
<b>R</b> = R/A male	<b>2</b> = double row	<b>01 - 40</b> = H - type - 1 row	<b>H</b> = H - type	<b>55</b> = gold
<b>S</b> = Straight male	<b>9</b> = loose contacts	<b>04 - 80</b> = H - type - 2 row	Refer to above drawings for details	Other platings on request
		<b>99</b> = loose contact MOQ: 10K / reel		

## Fully Shrouded

<p><b>D - Type</b> female plug (AWG 22 to 28)</p> <p>Order Code housing: <b>CRF-2xx-D200</b> Contact: <b>CRF-999-D200-99</b></p>	<p><b>D - Type</b> -THT- male</p> <p>Order Code straight: <b>CRS-2xx-D200-99</b> right angle: <b>CRR-2xx-D200-99</b></p>
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## Single side shrouded

<p><b>C - Type</b> female plug (AWG 22 to 26)</p> <p>Order Code housing: <b>CRF-1xx-C200</b> Contact: <b>CRF-999-C200-99</b></p>	<p><b>C - Type</b> -THT- male</p> <p>Order Code straight: <b>CRS-1xx-C200-99</b> right angle: <b>CRR-1xx-C200-99</b></p>
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## Single side shrouded

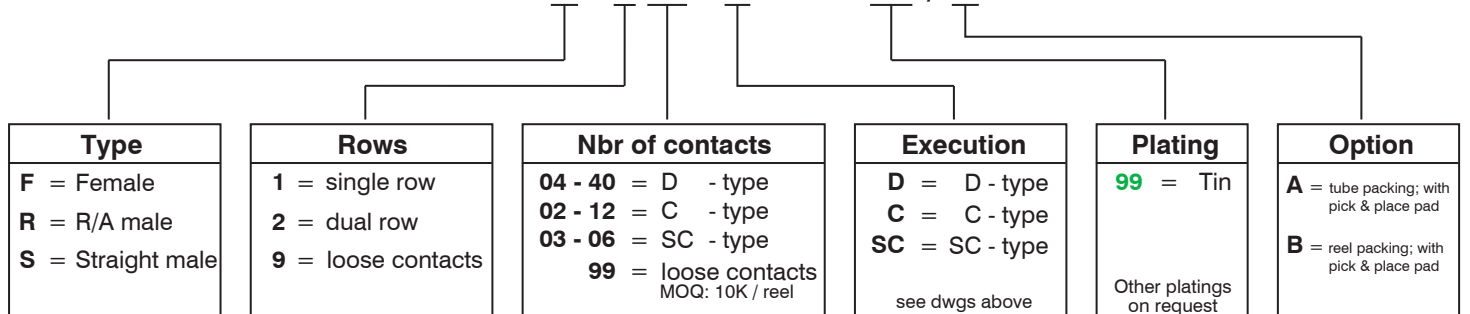
<p><b>SC - Type</b> -SMT- male (top entry)</p> <p>Order Code: <b>CRS-1xx-SC200-99/X</b></p>	
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## SPECIFICATIONS

Current rating	2 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	800 V AC	Insulator material	Nylon UL 94 V-0
Voltage rating	100 V AC max.	Operating temp.	-25°C to +85°C	PCB Thickness	1.60 mm (.063")

## How to order

**CR X - x xx - X 200 - 99 / X**



## Fully shrouded

<p><b>S - Type female plug (AWG 22 to 28)</b></p> <p>Order Code housing: <b>CRF-1xx-S250</b>      contact: <b>CRF-999-S250-99</b></p>	<p><b>S - Type -THT- male</b></p> <p>Order Code straight: <b>CRS-1xx-S250-99</b>      right angle: <b>CRR-1xx-S250-99</b></p>
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## Fully shrouded with inside ribs

<p><b>I - Type female plug (AWG 24 to 28)</b></p> <p>Order Code housing: <b>CRF-1xx-I250</b>      contact: <b>CRF-999-I250-99</b></p>	<p><b>I - Type -THT- male</b></p> <p>Order Code straight: <b>CRS-1xx-I250-99</b>      right angle: <b>CRR-1xx-I250-99</b></p>
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## Single side shrouded with inside ribs

<p><b>R - Type female plug (AWG 24 to 28)</b></p> <p>Order Code housing: <b>CRF-1xx-R250</b>      contact: <b>CRF-999-R250-99</b></p>	<p><b>R - Type -THT- male</b></p> <p>Order Code straight: <b>CRS-1xx-R250-99</b>      right angle: <b>CRR-1xx-R250-99</b></p>
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## SPECIFICATIONS

Current rating	3 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1000 V AC	Insulator material	Nylon UL 94 V-0
Voltage rating	250 V AC max.	Operating temp.	-25°C to +90°C	PCB Thickness	1.60 mm (.063")

## How to order

**CR X - x xx - X 250 - 99**

<p><b>Type</b></p> <p><b>F</b> = Female</p> <p><b>R</b> = R/A male</p> <p><b>S</b> = Straight male</p>	<p><b>Rows</b></p> <p><b>1</b> = single row</p> <p><b>9</b> = loose contacts</p>	<p><b>Nbr of contacts</b></p> <p><b>02 - 20</b> = S - type</p> <p><b>02 - 15</b> = I &amp; R - types</p> <p><b>99</b> = loose contacts MOQ: 10K / reel</p>	<p><b>Execution</b></p> <p><b>S</b> = S - type</p> <p><b>I</b> = I - type</p> <p><b>R</b> = R - type</p> <p>see dwgs above</p>	<p><b>Plating</b></p> <p><b>99</b> = tin <i>(leadfree)</i></p> <p>Other platings on request</p>
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## Shrouded with polarization feature

<p><b>P - Type</b> female plug (AWG 20 to 26)</p> <p>Order Code housing: <b>CRF-104-P250</b> contact: <b>CRF-999-P250-99</b></p>	<p><b>P - Type</b> -THT- male</p> <p>Order Code straight: <b>CRS-104-P250-99</b> right angle: <b>CRR-104-P250-99</b></p>
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## Friction Lock Header

<p><b>F - Type</b> female plug (AWG 22 to 28)</p> <p>Order Code housing: <b>CRF-1xx-F250</b> contact: <b>CRF-999-F250-99</b></p>	<p><b>F - Type</b> -THT- male</p> <p>Order Code straight: <b>CRS-1xx-F250-99</b> right angle: <b>CRR-1xx-F250-99</b></p>
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## Board-lock Type

<p><b>B - Type</b> male (AWG 22 to 28)</p> <p>Order Code housing: <b>CRM-1xx-B250</b> contact: <b>CRM-999-B250-99</b></p>	<p><b>PCB Hole Layout</b></p> <p> <math>.098 \pm .002</math>  <math>2.50 \pm 0.05</math>  <math>\phi 0.39 + .004</math>  <math>\phi 1.00 + 0.10</math> </p>
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## SPECIFICATIONS

Current rating	3 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1000 V AC	Insulator material	Nylon UL 94 V-0
Voltage rating	250 V AC max.	Operating temp.	-25°C to +85°C	PCB Thickness	1.60 mm (.063")

## How to order

**CR X - x xx - X 250 - 99**

<p><b>Type</b></p> <p><b>F</b> = Female  <b>R</b> = R/A male  <b>S</b> = Straight male  <b>M</b> = male contact &amp; header</p>	<p><b>Rows</b></p> <p><b>1</b> = single row  <b>9</b> = loose contacts</p>	<p><b>Nbr of contacts</b></p> <p><b>04</b> = P - type  <b>02 - 12</b> = F - type  <b>02 - 16</b> = B - type          (others on request)  <b>99</b> = loose contacts          MOQ: -P250- &amp; -B250- type = 10K / reel          -F250- type = 8K / reel</p>	<p><b>Execution</b></p> <p><b>P</b> = P - type  <b>F</b> = F - type  <b>B</b> = B - type</p> <p>see dwgs above</p>	<p><b>Plating</b></p> <p><b>99</b> = tin          (leadfree)</p> <p>Other platings on request</p>
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## Friction Lock Type

<p><b>F - Type</b> female plug (AWG 22 to 28)</p> <p>Order Code housing: <b>CRF-1xx-F254</b>      contact: <b>CRF-999-F254-99</b></p>	<p><b>F - Type</b> -THT- male</p> <p>Order Code straight: <b>CRS-1xx-F254-99</b>      right angle: <b>CRR-1xx-F254-99</b></p>
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## Female Header Type

<p><b>H - Type female dual row</b> (AWG 22 to 28) - without bump -</p> <p>Order Code housing: <b>CRF-2xx-H254</b></p>	<p><b>H - Type female dual row</b> (AWG 22 to 28) - with low bump -</p> <p>Order Code housing: <b>CRF-2xx-H254/P</b></p>	<p><b>H - Type female dual row</b> (AWG 22 to 28) - with high bump -</p> <p>Order Code housing: <b>CRF-2xx-H254/HP</b></p>
<p><b>H - Type female single row</b> (AWG 22 to 28) - without bump -</p> <p>Order Code housing: <b>CRF-1xx-H254</b></p>	<p><b>H - Type female contact</b></p> <p>if for single row 01-19 &amp; dual row 04-18 contacts: Order Code: <b>CRF-999L-H254-95</b></p> <p>if for single row 20-40 &amp; dual row 20-80 contacts: Order Code: <b>CRF-999-H254-95</b></p>	

## SPECIFICATIONS

Current rating	3 A	Operating temp.	-25°C to +90°C
Insulator resistance	1000 MΩ min.	Contact material	Copper alloy
Contact resistance	20 mΩ max.	Insulator material	Nylon UL 94 V-2
Withstanding voltage	1000 V AC	F-Type	P.B.T. UL 94 V-0
Voltage rating	250 V AC max.	H-Type	
		PCB Thickness	1.60 mm (.063")

## H - Type male contact

Order Code: **CRM-999-H254-55**

## How to order

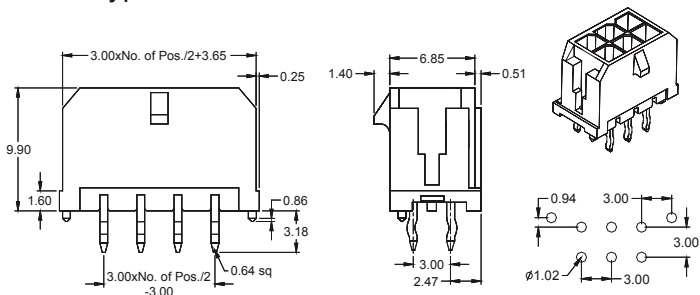
**CR X - x xx - X 254 - 99**

<p><b>Type</b></p> <p>Header Type:  <b>R</b> = R/A male  <b>S</b> = Straight male</p> <p>Contact Type:  <b>F</b> = Female  <b>M</b> = Male</p>	<p><b>Rows</b></p> <p><b>1</b> = single row  <b>2</b> = double row  <b>9</b> = loose contacts</p>	<p><b>Nbr of contacts</b></p> <p><b>02 - 20</b> = F - type  <b>01 - 40</b> = H - type - 1 row  <b>04 - 80</b> = H - type - 2 row  <b>99</b> = loose contact                      MOQ: 10K / reel</p>	<p><b>Execution</b></p> <p><b>F</b> = F - type  <b>H</b> = H - type</p> <p>Refer to above drawings for details</p>	<p><b>Plating</b></p> <p><b>99</b> = tin  <b>55</b> = gold</p> <p>NOTE: for CRF-999-H254 &amp; CRF-999L-H254 only tin/gold plating available</p> <p>Code: <b>95</b></p>
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## Male Type Fully Shrouded

### W - Type

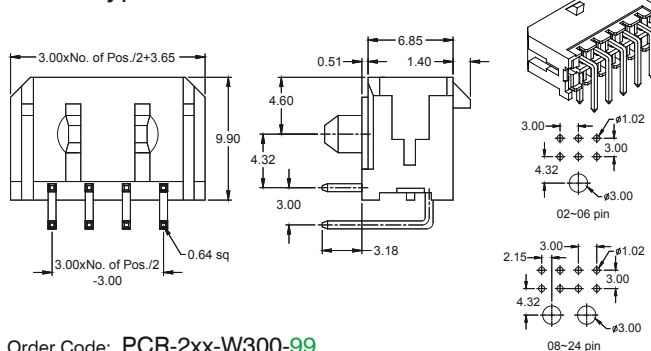
### -THT- straight



Order Code: PCS-2xx-W300-99

### W - Type

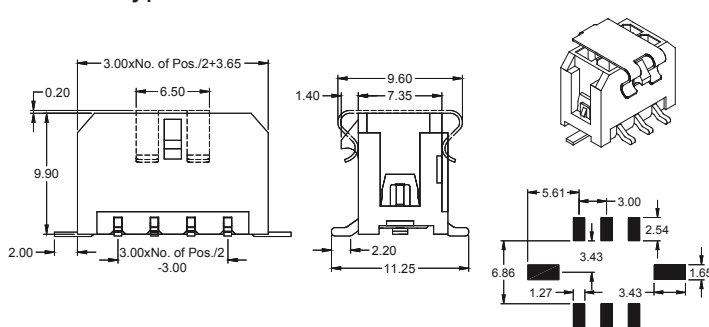
### -THT- right angle



Order Code: PCR-2xx-W300-99

### SW - Type

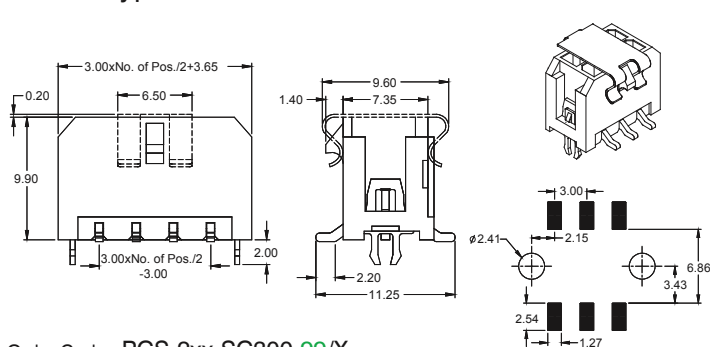
### -SMT- straight with solder tabs



Order Code: PCS-2xx-SW300-99/X

### SC - Type

### -SMT- straight with solder clips

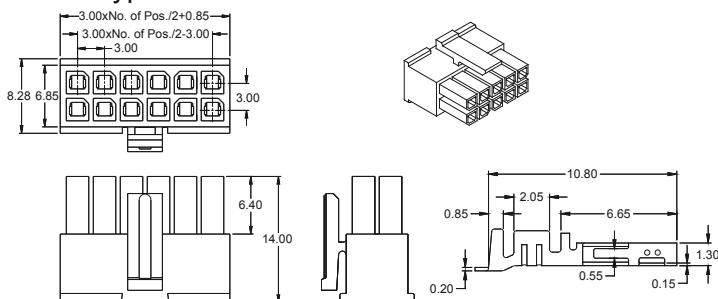


Order Code: PCS-2xx-SC300-99/X

## Female Type

### W - Type

(AWG 20 to 24)



Order Code housing: PCF-2xx-W300

Contact: PCF-999-W300-99

## SPECIFICATIONS

Current rating	5 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1500V AC	Insulator material	LCP UL 94 V-0(male) Nylon UL 94 V-2(female)
Voltage rating	250V AC max.	Operating temp.	-25°C to +85°C	PCB Thickness	1.60 mm (.063")

## How to order

PC X - x xx - X 300 - 99 / X

Type
<b>F</b> = Female
<b>R</b> = R/A male
<b>S</b> = Straight male

Rows
<b>2</b> = dual row
<b>9</b> = loose contacts

Nbr of contacts
<b>02 - 24</b> = W, SW, SC - type
<b>99</b> = loose contacts MOQ: 10K / reel

Execution
<b>W</b> = W - type
<b>SW</b> = SW - type
<b>SC</b> = SC - type
see dwgs above

Plating
<b>99</b> = Tin
Other platings on request

Option
<b>A</b> = tube packing; with pick & place pad
<b>B</b> = reel packing; with pick & place pad

**Friction lock**

<p><b>F - Type</b> female plug (AWG 18 to 24)</p> <p>Order Code housing: <b>PCF-1xx-F396</b> contact: <b>PCF-999-F396-99</b></p>	<p><b>F - Type</b> -THT- male</p> <p>Order Code straight: <b>PCS-1xx-F396-99</b> right angle: <b>PCR-1xx-F396-99</b></p>
--	--

**Latch lock**

<p><b>L - Type</b> female plug (AWG 18 to 24)</p> <p>Order Code housing: <b>PCF-106-L396</b> contact: <b>PCF-999-L396-99</b></p>	<p><b>L - Type</b> -THT- male</p> <p>Order Code straight: <b>PCS-106-L396-99</b> with locating pin: <b>PCS-106-L396-99/L</b></p>
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**Quick lock**

<p><b>Q - Type</b> female plug (AWG 18 to 22)</p> <p>Order Code housing: <b>PCF-1xx-Q396</b> contact: <b>PCF-999-Q396-99</b></p>	<p><b>Q - Type</b> -THT- male</p> <p>Order Code straight: <b>PCS-1xx-Q396-99</b> right angle: <b>PCR-1xx-Q396-99</b></p>
--	--

**SPECIFICATIONS**

Current rating	5 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1500 V AC	Insulator material	Nylon UL 94 V-2
Voltage rating	250 V AC max.	Operating temp.	-25°C to +105°C	PCB thickness	Nylon UL 94 V-0 (Q-Type) 1.60 mm (.063")

**How to order**

**PC X - x xx - X 396 - 99**

<p><b>Type</b></p> <p><b>F</b> = Female <b>R</b> = R/A male <b>S</b> = Straight male</p>	<p><b>Rows</b></p> <p><b>1</b> = single row <b>9</b> = loose contacts</p>	<p><b>Nbr of contacts</b></p> <p><b>02 - 13</b> = F - type <b>06</b> = L - type <b>02 - 15</b> = Q - type <b>99</b> = loose contacts MOQ for F396 &amp; L396 = 6K/reel for Q396 = 4K reel</p>	<p><b>Execution</b></p> <p><b>F</b> = F - type <b>L</b> = L - type <b>Q</b> = Q - type</p> <p>see dwgs above</p>	<p><b>Plating</b></p> <p><b>99</b> = tin <i>(leadfree)</i></p> <p>Other platings on request</p>
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## Male Type Fully Shrouded

<p><b>P - Type</b>      -THT- straight</p> <p>Order Code: <b>PCS-1xx-P420-99</b></p>	<p><b>P - Type</b>      -THT- right angle (with board lock clips)</p> <p>Order Code: <b>PCR-1xx-P420-99</b></p>
<p><b>A - Type</b>      -THT- right angle</p> <p>Order Code: <b>PCR-1xx-A420-99</b></p>	<p><b>W - Type</b>      -THT- right angle (with mounting ears)</p> <p>Order Code: <b>PCR-1xx-W420-99</b></p>

## Female Type

<p><b>P - Type</b>      (AWG 16 to 24)</p> <p>Order Code housing: <b>PCF-1xx-P420</b>      Contact: <b>PCF-999-P420-99</b></p>	
--	--

## SPECIFICATIONS

Current rating	7 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1500 V AC	Insulator material	Nylon UL 94 V-2
Voltage rating	600 V AC max.	Operating temp.	-25°C to +85°C	PCB Thickness	1.60 mm (.063")

## How to order

**PC X - x xx - X 420 - 99**

<p><b>Type</b></p> <p><b>F</b> = Female <b>R</b> = R/A male <b>S</b> = Straight male</p>	<p><b>Rows</b></p> <p><b>1</b> = single row <b>9</b> = loose contacts</p>	<p><b>Nbr of contacts</b></p> <p><b>02 - 12</b> = P, A, W - type <b>99</b> = loose contacts MOQ: 10K / reel</p>	<p><b>Execution</b></p> <p><b>P</b> = P - type <b>A</b> = A - type <b>W</b> = W - type see dwgs above</p>	<p><b>Plating</b></p> <p><b>99</b> = Tin</p> <p>Other platings on request</p>
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## Male Type Fully Shrouded

**P - Type**      -THT- straight

Order Code: **PCS-2xx-P420-99**

**P - Type**      -THT- right angle (with board lock clips)

Order Code: **PCR-2xx-P420-99**

**W - Type**      -THT- right angle (with mounting ears)

Order Code: **PCR-2xx-W420-99**

## Female Type

**P - Type**      (AWG 16 to 24)

Order Code housing: **PCF-2xx-P420**      Contact: **PCF-999-P420-99**

## SPECIFICATIONS

Current rating	7 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1500 V AC	Insulator material	Nylon UL 94 V-2
Voltage rating	600 V AC max.	Operating temp.	-25°C to +85°C	PCB Thickness	1.60 mm (.063")

## How to order

**PC X - x xx - X 420 - 99**

Type
<b>F</b> = Female
<b>R</b> = R/A male
<b>S</b> = Straight male

Rows
<b>2</b> = dual row
<b>9</b> = loose contacts

Nbr of contacts
<b>02 - 24</b> = P, W - type
<b>99</b> = loose contacts MOQ: 10K / reel

Execution
<b>P</b> = P - type
<b>W</b> = W - type
see dwgs above

Plating
<b>99</b> = Tin
Other platings on request

Friction lock

<p><b>F - Type</b> female plug (AWG 18 to 24)</p> <p>Order Code housing: <b>PCF-1xx-F508</b> contact: <b>PCF-999-F508-99</b></p>	<p><b>F - Type</b> -THT- male</p> <p>Order Code straight: <b>PCS-1xx-F508-99</b> right angle: <b>PCR-1xx-F508-99</b></p>
--	--

4 Contact Female Types

<p><b>P - Type</b> polarized insulator (AWG 18 to 20)</p> <p>Order Code housing: <b>PCF-104-P508</b> contact: <b>PCF-999-P508-99</b></p>	<p><b>I - Type</b> IDC - Connector (AWG 18 to 20)</p> <p>Order Code: with standard Cover <b>PCF-104-I508-99</b> add /C if type "C" Cover</p>
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4 Contact Crimp "shrouded" Male Type

**C - Type** (AWG 18 to 22)

Order Code housing: **PCM-104-C508** contact: **PCM-999-C508-99**

**SPECIFICATIONS**

Current rating	7 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1500 V AC	Insulator material	Nylon UL 94 V-2
Voltage rating	250 V AC max.	Operating temp.	-25°C to +85°C	PCB Thickness	1.60 mm (.063")

How to order

**PC X - x xx - X 508 - 99**

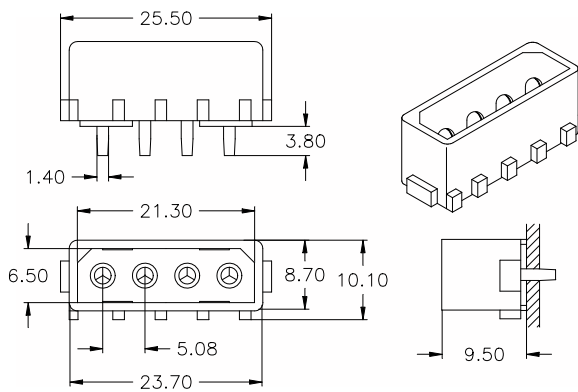
<p><b>Type</b></p> <p><b>F</b> = Female  <b>R</b> = R/A male  <b>S</b> = Straight male  <b>M</b> = male contact &amp; header</p>	<p><b>Rows</b></p> <p><b>1</b> = single row  <b>9</b> = if contact</p>	<p><b>Nbr of contacts</b></p> <p><b>02 - 12</b> = F - type  <b>04</b> = P, I, C - types  <b>99</b> = loose contacts                      MOQ: -F508- type = 6K / reel                      -P508- type = 7K / reel                      -C508- type = 7K / reel</p>	<p><b>Execution</b></p> <p><b>F</b> = F - type  <b>P</b> = P - type  <b>I</b> = I - type  <b>C</b> = C - type                      see drawings above</p>	<p><b>Plating</b></p> <p><b>99</b> = tin                      (leadfree)                      Other platings on request</p>
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# 5.08mm Power Connectors Disk Drive Power Connection System



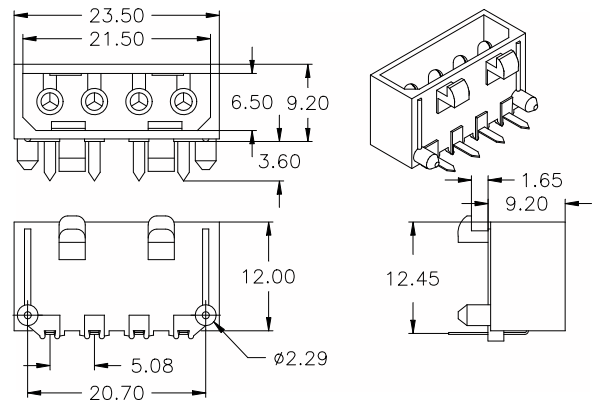
## 4 Contact Male - Through Board Solder Types

### Straight "T" type

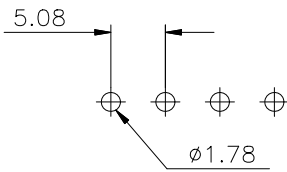


Order Code: **PCS-104-T508-99**

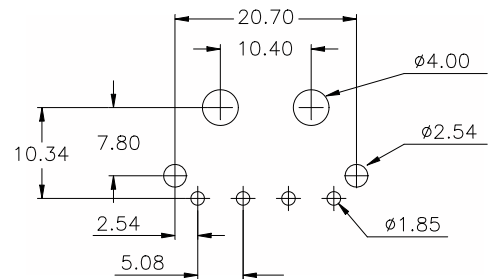
### Right angle "T" type



Order Code: **PCR-104-T508-99**



PCB Hole Layout



PCB Hole Layout

## SPECIFICATIONS

Current rating	7 A	Contact resistance	20 m $\Omega$ max.	Contact material	Copper alloy
Insulator resistance	1000 M $\Omega$ min.	Withstanding voltage	1500 V AC	Insulator material	Nylon UL 94 V-2
Voltage rating	250 V AC max.	Operating temp.	-25°C to +90°C	PCB Thickness	1.60 mm (.063")

## How to order

PC X - 104 - T 508 - 99

Type	
<b>R</b>	= right angle type
<b>S</b>	= straight type

Plating	
<b>99</b>	= tin (leadfree)

Quick Lock

<p><b>P - Type female</b></p> <p>Order Code housing: <b>PCF-1xx-P635/X</b></p>	<p><b>PM - Type Clutch</b></p> <p>Order Code housing: <b>PCC-1xx-PM635/X</b></p>
<p><b>P - Type female contact (AWG 16 to 20)</b></p> <p>Order Code contact: <b>PCF-999-P635-99</b></p>	<p><b>P - Type male contact (AWG 16 to 20)</b></p> <p>Order Code contact: <b>PCM-999-P635-99</b></p>

Fully Shrouded

<p><b>P - Type -THT- male &amp; female straight</b></p> <p>Option Contact Type Order Code</p> <p>male: <b>PCS-1xx-PM635-99</b></p> <p>female: <b>PCS-1xx-PF635-99</b></p>	<p><b>PW - Type -THT- male &amp; female right angle (with mounting ears)</b></p> <p>Option Contact Type Order Code</p> <p>male: <b>PCR-1xx-PWM635-99</b></p> <p>female: <b>PCR-1xx-PWF635-99</b></p>
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SPECIFICATIONS

Current rating	13 A	Contact resistance	20 mΩ max.	Contact material	Copper alloy
Insulator resistance	1000 MΩ min.	Withstanding voltage	1000 V AC	Insulator material	Nylon
Voltage rating	600 V AC max.	Operating temp.	-55°C to +105°C	PCB Thickness	1.60mm (.063")

How to order

PC X - x xx - X 635 - 99 / X

Type	Rows	Nbr of contacts	Execution	Plating	Option
<b>C</b> = Clutch <b>F</b> = Female <b>M</b> = Male <b>S</b> = Straight <b>R</b> = Right angle	<b>1</b> = single row <b>9</b> = loose contacts	<b>02 - 10</b> = P, PM, PF, PWM PWF - type <b>99</b> = loose contacts MOQ: 10K / reel	<b>P</b> = P-type <b>PM</b> = P-type male <b>PF</b> = P-type female <b>PWM</b> = PW-type male <b>PWF</b> = PW-type female see dwgs above	<b>99</b> = tin <i>(leadfree)</i>  Other platings on request	<b>N</b> = nature colour (UL 94 V-2)  <b>W</b> = white colour (UL 94 V-0)

# Other products from E-tec

Please contact your closest sales office for further information.



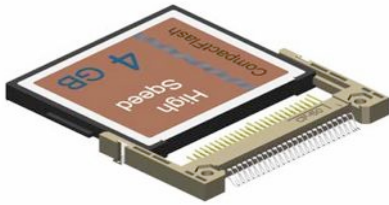
Insertion- Extraxtion Tools



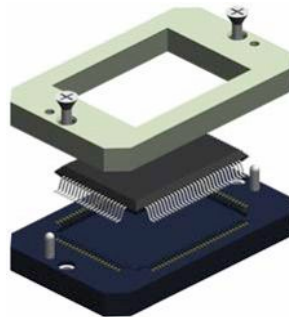
DIMM Sockets



DIP Switch



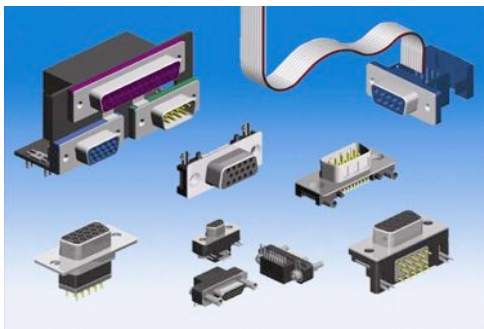
Compact Flash Connector



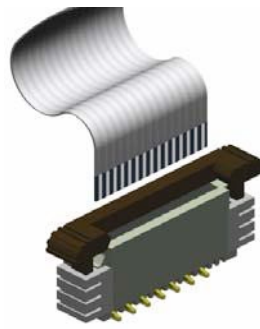
Gullwing Chip Sockets



USB & IEEE 1394 Connectors



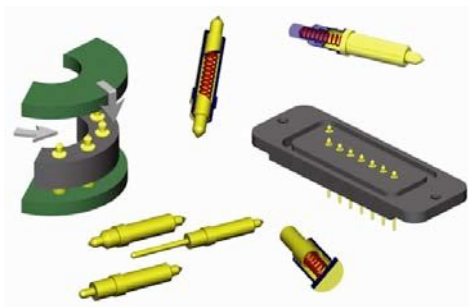
D-Sub Connectors



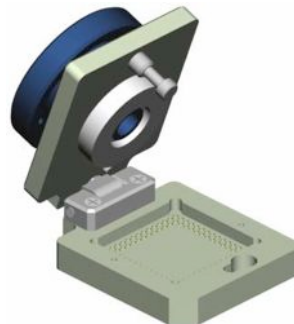
Flex Cable Connectors



HDMI Connectors



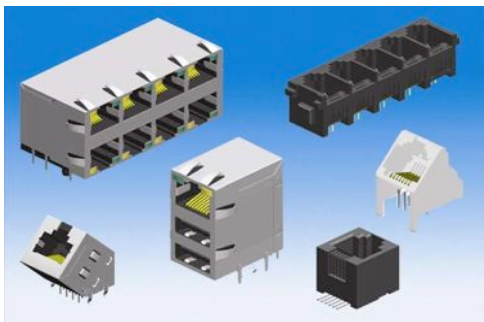
Probe Pin & Probe Pin Connectors



Ball / Land Grid Array Sockets



Multi Media Card Connectors



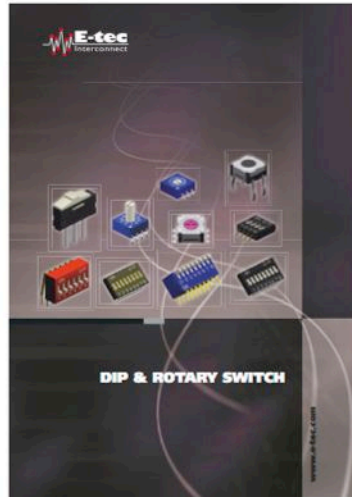
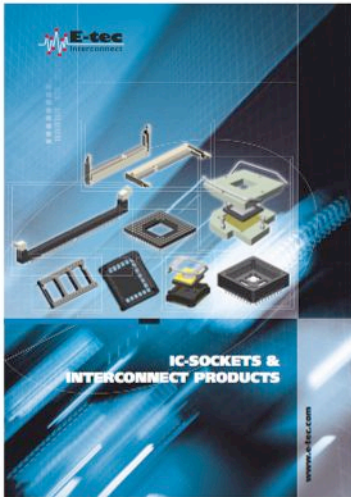
Modular Plugs & Jacks



Phono - & DC - Power Connectors



RF - Connectors



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