

# Coin Cell Supercapacitors

## KR Series



**Leaded Device**

### Description

Cooper Bussmann<sup>®</sup> PowerStor<sup>®</sup> supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor solutions tailored to specific applications that range from a few micro-amps for several days to several amps for milliseconds.



The KR series offers a wide range of high capacitance coin cell style products for use in memory & RTC back-up applications. End products include computers, cameras, camcorders, telephones, printers, car stereos, CCTV, set top box and PDP.

### Features & Benefits:

- High specific capacitance
- Low leakage current
- Long cycle life
- Eco-friendly

### Typical Applications:

- Computer & peripherals
- Telephones
- DSL modems & routers
- Digital radios
- Set top boxes
- White goods & kitchen appliances
- Copiers
- Electric utility meters
- HVAC controls

### Specifications

<b>Working Voltage</b>	5.5V
<b>Surge Voltage</b>	6.3V
<b>Nominal Capacitance Range</b>	0.1 to 1.5F
<b>Capacitance Tolerance</b>	-20% to +80% (20°C)
<b>Operating Temperature Range</b>	-25°C to 70°C

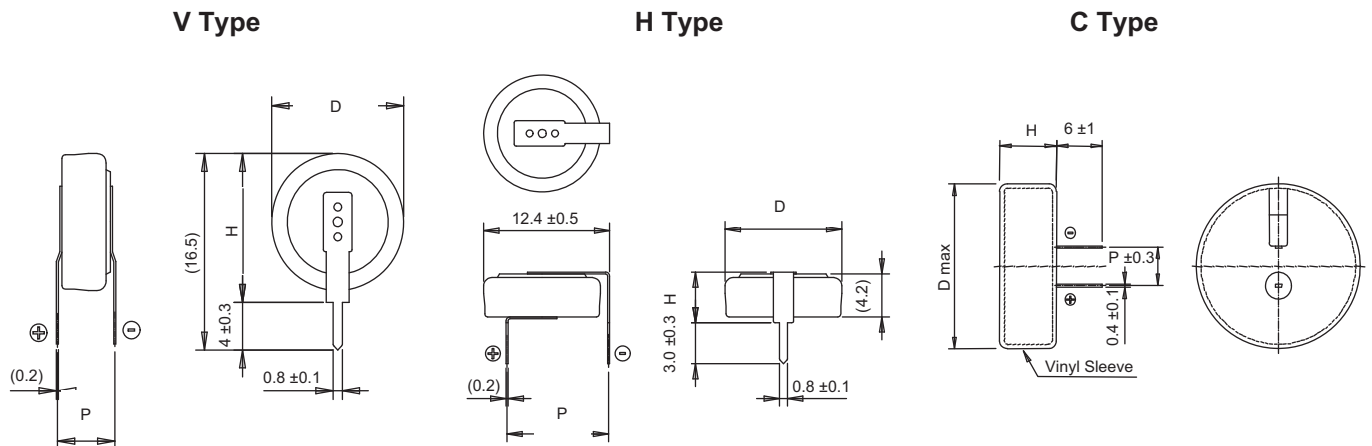
Standard Products						
Nominal Capacitance (F)	Part Number	Nominal ESR ( $\Omega$ ) (Equivalent Series Resistance) Measured @ 1kHz	Nominal Dimensions (mm)			Typical Mass (grams/1 piece)
			Diameter	Height	Lead C to C	
0.1	KR-5R5V104-R	75	11.5	12.5	5	1.4
0.1	KR-5R5H104-R	75	11.5	5	10	1.4
0.1	KR-5R5C104-R	75	13.5	7.5	5	3.3
0.22	KR-5R5V224-R	75	11.5	12.5	5	1.4
0.22	KR-5R5H224-R	75	11.5	5	10	1.4
0.22	KR-5R5C224-R	75	13.5	7.5	5	3.3
0.33	KR-5R5V334-R	50	11.5	12.5	5	1.4
0.33	KR-5R5H334-R	50	11.5	5	10	1.4
0.33	KR-5R5C334-R	50	13.5	7.5	5	3.3
0.47	KR-5R5V474-R	50	11.5	12.5	5	1.4
0.47	KR-5R5H474-R	50	11.5	5	10	1.4
0.47	KR-5R5C474-R	50	13.5	7.5	5	3.3
1.0	KR-5R5V105-R	30	19	19.5	5	4.2
1.0	KR-5R5H105-R	30	19	6.5	20	4.2
1.0	KR-5R5C105-R	30	21.5	7.5	5	9.1
1.5	KR-5R5V155-R	30	19	19.5	5	4.2
1.5	KR-5R5H155-R	30	19	6.5	20	4.2
1.5	KR-5R5C155-R	30	21.5	7.5	5	9.1

Performance		
Parameter	Capacitance Change (% of initial measured value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 5.5Vdc)	≤ 30	≤ 400
Storage - Low and High Temperature (1000 hrs @ -25°C and 70°C)	≤ 30	≤ 400

Dimensions (mm)			
Part Number	D	H	P
KR-5R5V104-R	11.5	12.5	5
KR-5R5H104-R	11.5	5	10
KR-5R5C104-R	13.5	7.5	5
KR-5R5V224-R	11.5	12.5	5
KR-5R5H224-R	11.5	5	10
KR-5R5C224-R	13.5	7.5	5
KR-5R5V334-R	11.5	12.5	5
KR-5R5H334-R	11.5	5	10
KR-5R5C334-R	13.5	7.5	5
KR-5R5V474-R	11.5	12.5	5
KR-5R5H474-R	11.5	5	10
KR-5R5C474-R	13.5	7.5	5
KR-5R5V105-R	19	19.5	5
KR-5R5H105-R	19	6.5	20
KR-5R5C105-R	21.5	7.5	5
KR-5R5V155-R	19	19.5	5
KR-5R5H155-R	19	6.5	20
KR-5R5C155-R	21.5	7.5	5

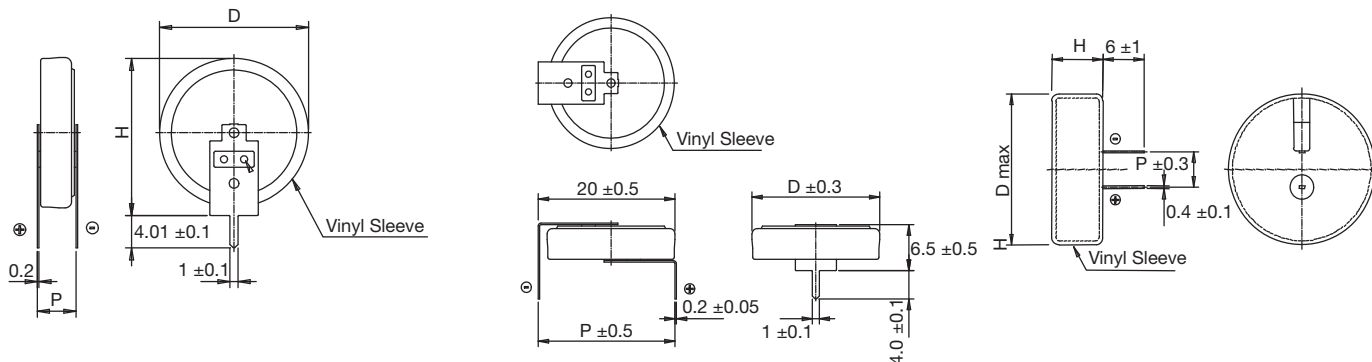
**Dimensions - mm**

For parts 0.1F to 0.47F



**Dimensions - mm**

For parts 1.0F to 1.5F



Part Numbering System									
K	R	-	5	R	5			-	R
Series Code	Version		Voltage (V) R is decimal		Configuration	Capacitance (µF)			RoHS Compliant
K = Coin Cell	R = Leaded		5R5 = 5.5V		V = Vertical H = Horizontal C = Cylindrical	Value	Multiplier	Example: 474 = 47 x 10 <sup>4</sup> µF or 0.47F	

### Packaging Information

Standard packaging: Bulk, 500 units per package.

For 0.1F to 0.47F 500 units per bag.

For 1.0F to 1.5F 100 units per tray, 5 trays per box

### Part Marking

Manufacturer  
Capacitance (F)  
Max. Operating Voltage (V)  
Polarity Marking

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