

SIMATIC S7-1200, Digital I/O SB 1223, 2 DI/2 DQ, 5V DC 200kHz



Figure similar

### General information

Product type designation SB 1223, DI 2x5 V DC/DQ 2x5 V DC 200 kHz

### Input current

from backplane bus 5 V DC, typ. 35 mA

### Power loss

Power loss, typ. 0.5 W

### Digital inputs

Number of digital inputs 2; Current-sourcing

- in groups of 2

### Input voltage

- Type of input voltage DC
- Rated value (DC) 5 V
- for signal "0" (L+ minus 1.0 V DC) ... L+
- for signal "1" 0 V ... (L+ minus 2.0 V DC)

### Input current

<ul style="list-style-type: none"> <li>• for signal "0", max. (permissible quiescent current)</li> </ul>	2.2 mA
<ul style="list-style-type: none"> <li>• for signal "1", min.</li> </ul>	5.1 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— parameterizable	Yes; 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 $\mu$ s; 0.05 / 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 ms
for interrupt inputs	
— parameterizable	Yes
for technological functions	
— parameterizable	Yes
<b>Cable length</b>	
• shielded, max.	50 m; shielded, twisted pair
<b>Digital outputs</b>	
Number of digital outputs	2; MOSFET, solid-state (current-sinking/current-sourcing)
<ul style="list-style-type: none"> <li>• in groups of</li> </ul>	2
Short-circuit protection	No
<b>Switching capacity of the outputs</b>	
<ul style="list-style-type: none"> <li>• with resistive load, max.</li> </ul>	0.1 A
<b>Load resistance range</b>	
<ul style="list-style-type: none"> <li>• upper limit</li> </ul>	7 $\Omega$
<b>Output voltage</b>	
<ul style="list-style-type: none"> <li>• Rated value (DC)</li> </ul>	5 V
<ul style="list-style-type: none"> <li>• for signal "0", max.</li> </ul>	0.2 V
<ul style="list-style-type: none"> <li>• for signal "1", min.</li> </ul>	L+ minus 0.7 V DC
<ul style="list-style-type: none"> <li>• for signal "1", max.</li> </ul>	6 V
<b>Output current</b>	
<ul style="list-style-type: none"> <li>• for signal "1" permissible range, max.</li> </ul>	0.1 A
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	50 m
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• for status of the inputs</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• for status of the outputs</li> </ul>	Yes
<b>Degree and class of protection</b>	
Degree of protection acc. to EN 60529	
<ul style="list-style-type: none"> <li>• IP20</li> </ul>	Yes
<b>Ambient conditions</b>	
Free fall	
<ul style="list-style-type: none"> <li>• Fall height, max.</li> </ul>	0.3 m; five times, in product package
Ambient temperature during operation	

- min. -20 °C
- max. 60 °C
- horizontal installation, min. -20 °C
- horizontal installation, max. 60 °C
- vertical installation, min. -20 °C
- vertical installation, max. 50 °C

#### Ambient temperature during storage/transportation

- min. -40 °C
- max. 70 °C

#### Air pressure acc. to IEC 60068-2-13

- Storage/transport, min. 660 hPa
- Storage/transport, max. 1 080 hPa

#### Relative humidity

- Operation at 25 °C without condensation, max. 95 %

#### Mechanics/material

##### Enclosure material (front)

- Plastic Yes

#### Dimensions

Width	38 mm
Height	62 mm
Depth	21 mm

#### Weights

Weight, approx. 35 g

**last modified:** 01/02/2019