



Figure similar

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

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	
• for signal "0", max. (permissible quiescent current)	2.2 mA
• for signal "1", min.	5.1 mA
Input delay (for rated value of input voltage)	
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 μ 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
Cable length	
• shielded, max.	50 m; shielded, twisted pair
Digital outputs	
Number of digital outputs	2; MOSFET, solid-state (current-sinking/current-sourcing)
• in groups of	2
Short-circuit protection	No
Switching capacity of the outputs	
• with resistive load, max.	0.1 A
Load resistance range	
• upper limit	7 Ω
Output voltage	

<ul style="list-style-type: none"> Rated value (DC) 	5 V
<ul style="list-style-type: none"> for signal "0", max. 	0.2 V
<ul style="list-style-type: none"> for signal "1", min. 	L+ minus 0.7 V DC
<ul style="list-style-type: none"> for signal "1", max. 	6 V
Output current	
<ul style="list-style-type: none"> for signal "1" permissible range, max. 	0.1 A
Cable length	
<ul style="list-style-type: none"> shielded, max. 	50 m
Interrupts/diagnostics/status information	
Diagnostics indication LED	
<ul style="list-style-type: none"> for status of the inputs 	Yes
<ul style="list-style-type: none"> for status of the outputs 	Yes
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
cULus	Yes
FM approval	Yes
KC approval	Yes
Marine approval	Yes
Ambient conditions	
Free fall	
<ul style="list-style-type: none"> Fall height, max. 	0.3 m; five times, in product package
Ambient temperature during operation	
<ul style="list-style-type: none"> min. 	-20 °C
<ul style="list-style-type: none"> max. 	60 °C
<ul style="list-style-type: none"> horizontal installation, min. 	-20 °C
<ul style="list-style-type: none"> horizontal installation, max. 	60 °C
<ul style="list-style-type: none"> vertical installation, min. 	-20 °C
<ul style="list-style-type: none"> vertical installation, max. 	50 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> min. 	-40 °C
<ul style="list-style-type: none"> max. 	70 °C
Air pressure acc. to IEC 60068-2-13	
<ul style="list-style-type: none"> Storage/transport, min. 	660 hPa
<ul style="list-style-type: none"> Storage/transport, max. 	1 080 hPa
Relative humidity	
<ul style="list-style-type: none"> Operation at 25 °C without condensation, max. 	95 %
Mechanics/material	
Enclosure material (front)	
<ul style="list-style-type: none"> Plastic 	Yes
Dimensions	
Width	38 mm
Height	62 mm
Depth	21 mm
Weights	
Weight, approx.	35 g
last modified:	3/14/2020 