

Product datasheet

Specifications



solid state relay - panel mounting -
input 3.5-32V DC, output 1-150 V
DC, 40A

Local distributor code: 403015168 SSP1D440BD

EAN Code : 3606485441832

Main

Range of product	Harmony Solid State Relays
Product or component type	Solid state relay up to 40 A
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
[In] rated current	40 A
Solid state output type	DC switching Mosfet output
Output switching mode	DC switching

Complementary

[Uc] control circuit voltage	3.5...32 V DC
Minimum switching voltage	3.5 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	0.1 ms (turn-on) 0.1 ms (turn-off)
Input current	10...15 mA
Output voltage	1...150 V DC
Load current	0.001...40 A
Surge current	106 A for 10 ms
Co-ordination type	Type 2 - 20 A miniature circuit breaker (MCB) - curve B Type 1 - 40 A miniature circuit breaker (MCB) - curve B
Maximum leakage current	0.3 mA off-state
Maximum voltage drop	<2.1 V on-state
Insulation resistance	1000 MOhm at 500 V DC
Maximum capacitance	50 pF for input/output
Dielectric strength	2.5 kV AC for input/output 2.5 kV AC for input or output to case
[Uimp] rated impulse withstand voltage	2.5 kV output to case
Tightening torque	1.5...1.7 N.m for input 2...2.2 N.m for output
Connections - terminals	Screw terminals: 0.2...3.3 mm ² , (AWG 24...AWG 12) with cable end for input

Screw terminals: 0.5...5.26 mm², (AWG 20...AWG 10) with cable end for output
 Screw terminals: 0.2...3.3 mm², (AWG 24...AWG 12) without cable end for input
 Screw terminals: 0.5...8.26 mm², (AWG 20...AWG 8) without cable end for output
 Forked type tag connectors: 9.2 x 4 mm for input
 Ring lugs: 9.2 x 4 mm for input
 Forked type tag connectors: 11.7 x 4.5 mm for output
 Ring lugs: 11.7 x 4.5 mm for output

Thermal resistance	0.22 °C/W junction to case
LED indicator	LED, green for input
IP degree of protection	IP20
Safety reliability data	MTTFd = 1875.9 years B10d = 1731395
Net weight	89.2 g
Device presentation	Complete product

Environment

Ambient air temperature for operation	-40...80 °C
Ambient air temperature for storage	-40...125 °C
Pollution degree	2
Overvoltage category	III
Product certifications	CSA CE UL EAC
Marking	CE EAC CSA UL
Standards	CSA C22.2 No 14-13 EN/IEC 60950-1 UL 508 EN/IEC 62314

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	104.0 g
Package 1 Height	3.8 cm
Package 1 width	4.8 cm
Package 1 Length	6.6 cm
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Weight	3.415 kg
Package 2 Height	15.0 cm
Package 2 width	15.0 cm
Package 2 Length	40.0 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)

[EU RoHS Declaration](#)

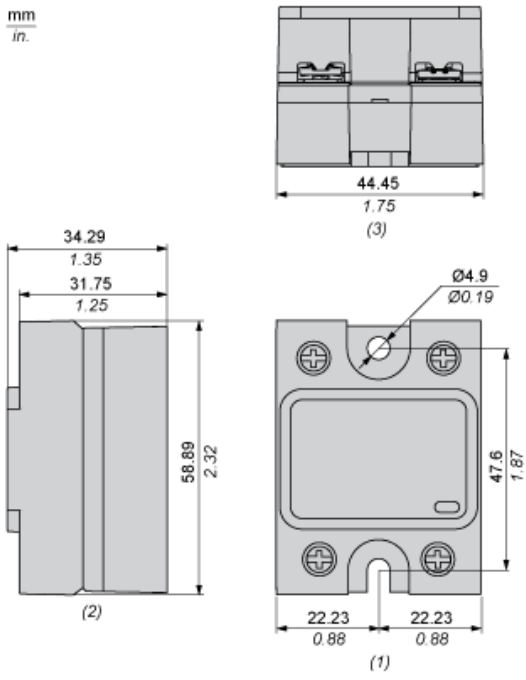
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months
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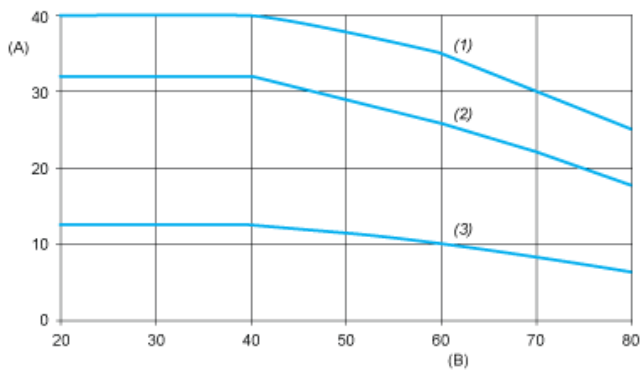
Dimensions

mm
in.



- (1) Front view
- (2) Side view
- (3) Bottom view

Derating Curves



- A :** Load Current (Arms)
- B :** Ambient Temperature (°C)
- (1)** For Heatsink SSRHD10
- (2)** For Heatsink SSRHP17
- (3)** No Heatsink