Product data sheet

Specifications



panel mount relay, Harmony Solid State Relays, 10A, zeroVoltage switching, input 3...32V DC, output 24…300V AC

SSP1A110BD

Product availability : Stock - Normally stocked in distribution facility

Main

Range of Product	Harmony Solid State Relays
Product or Component Type	Solid state relay up to 10 A
Device short name	SSP1
Mounting Support	Panel
Number of phases	1 phase
Line Rated Current	10 A
Solid state output type	Zero voltage switching SCR output
Output switching mode	Zero voltage switching

Complementary

[Uc] control circuit voltage	3...32 V DC
Minimum switching voltage	3 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	0.5 cycle (turn-on) 0.5 cycle (turn-off)
Input current	10 mA at 12 V DC
Output voltage	24...300 V AC
Load current	0.15…10 A
Transient overvoltage	600 V
Surge current	120 A 16.6 ms
Maximum I²t for fusing	60 A².s for 8.33 ms at 60 Hz 66 A².s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 13 A miniature circuit breaker (MCB) B Type 2 - 10 A miniature circuit breaker (MCB) B
Maximum leakage current	1 mA off-state
Maximum voltage drop	<1.15 V on-state
DV/Dt	500 V/µs off-state at maximum voltage
Power factor	0.5 (with maximum load)
Motor controller rating	0.5 hp 120 V AC 1 hp 240 V AC

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Insulation resistance	1000 MOhm at 500 V DC
Maximum capacitance	10 pF for input/output
Dielectric strength	4 kV AC for input/output 4 kV AC for input or output to case
[Uimp] rated impulse withstand voltage	6 kV output to case 6 kV input to output
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 mm², AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm², AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm², AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm², AWG 20...AWG 8) without cable end output Forked type tag connectors 9.2 x 4 mm input Ring lugs 9.2 x 4 mm input Forked type tag connectors 11.7 x 4.5 mm output Ring lugs 11.7 x 4.5 mm output
Thermal resistance	1.03 °C/W junction to case
LED indicator	LED, green input
IP degree of protection	IP20
Safety reliability data	B10d = 1731395 MTTFd = 1875.9 years
Net Weight	3.15 oz (89.2 g)
Device presentation	Complete product

Environment

Ambient air temperature for operation	-40…176 °F (-40…80 °C)
Ambient Air Temperature for Storage	-40…257 °F (-40…125 °C)
Pollution degree	2
Overvoltage category	III
Product Certifications	CE CSA UL EAC
Marking	CSA UL EAC CE
Standards	CSA C22.2 No 14-13 EN/IEC 60950-1 EN/IEC 62314 UL 508

Ordering and shipping details

Category	22375-INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	3606485441849
Returnability	No
Country of origin	MX

Packing Units

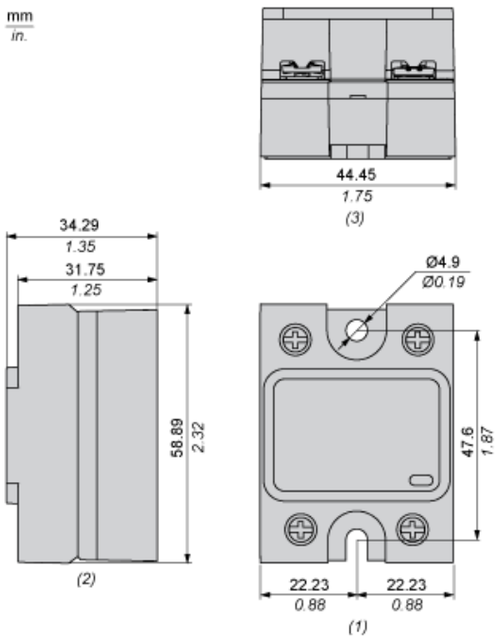
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.50 in (3.8 cm)
Package 1 Width	1.89 in (4.8 cm)

Package 1 Length	2.64 in (6.7 cm)
Package 1 Weight	3.42 oz (97.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	7.29 lb(US) (3.307 kg)

Offer Sustainability

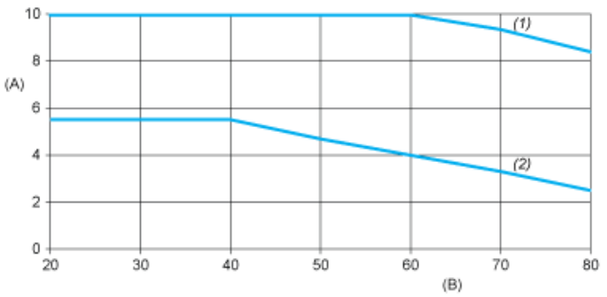
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Dimensions



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

Derating Curves



A : Load Current (Arms)
B : Ambient Temperature (°C)
(1) For Heatsink SSRHP25
(2) No Heatsink

Recommended replacement(s)