

SSP1D412BDT

Solid state panel mount relay, 12 A, DC switching, thermal pad, input 3.5...32 V DC, output 1...150 V DC



Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Provided accessory	Thermal pad
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
Contacts type and configuration	1 NO
Line Rated Current	12 A
Solid state output type	DC switching Mosfet output

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...12 A
Surge current	31 A 10 ms
Co-ordination type	Type 1 - 10 A miniature circuit breaker (MCB) B Type 2 - 6 A miniature circuit breaker (MCB) B
Maximum leakage current	0.3 mA off-state
Maximum voltage drop	<2.8 V on-state
Insulation resistance	1000 MOhm 500 V DC
Maximum capacitance	50 pF input/output
Dielectric strength	2.5 kV AC input/output 2.5 kV AC input or output to case
[Uimp] rated impulse withstand voltage	2.5 kV output to case
Tightening torque	1.5...1.7 N.m input 2...2.2 N.m output
Connections - terminals	Screw terminals 0.2...3.3 mm ² , AWG 24...AWG 12) with cable end input Screw terminals 0.5...5.26 mm ² , AWG 20...AWG 10) with cable end output Screw terminals 0.2...3.3 mm ² , AWG 24...AWG 12) without cable end input Screw terminals 0.5...8.26 mm ² , 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	0.71 °C/W junction to case
Thermal pad impedance	0.48 °C-in ² /W at 25 psi
LED indicator	LED, green input
IP degree of protection	IP20
Safety reliability data	MTTFd = 1875.9 years B10d = 1731395
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 UL EAC CSA RoHS
Marking	CE UL EAC CSA
Standards	EN/IEC 62314 UL 508 EN/IEC 60950-1 CSA C22.2 No 14-13

Ordering and shipping details

Category	22375 - INTERFACE MODULE(ABA,R,S)
Discount Schedule	CP2
GTIN	00785901774112
Nbr. of units in pkg.	1
Package weight(Lbs)	0.21 lb(US) (0.10 kg)
Returnability	Yes
Country of origin	MX

Packing Units

Package 1 Height	0.380 dm
Package 1 width	0.480 dm
Package 1 Length	0.650 dm

Offer Sustainability

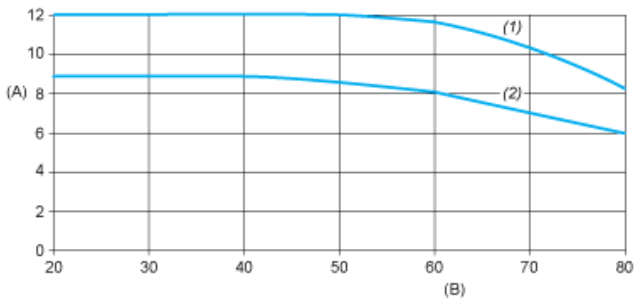
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
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

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