

Product data sheet

Characteristics

SSP1A110M7T

single phase relay, Harmony Solid State Relays, 10A, panel mount, zero voltage switching, thermal pad, input 90 to 280V AC, output 24 to 300V AC



Main

Range of product	Harmony Solid State Relays
Provided accessory	Thermal pad
Product or component type	Solid state relay up to 10 A
Device short name	SSP1
Mounting support	Panel
Number of phases	1 phase
[In] rated current	10 A
Solid state output type	Zero voltage switching SCR output
Output switching mode	Zero voltage switching

Complementary

Minimum switching voltage	90 V AC turn-on
Maximum switching voltage	10 V AC turn-off
Response time	30 ms (turn-off) 25 ms (turn-on)
Input current	5...10 mA
Load current	0.15...10 A
Transient overvoltage	600 V
Surge current	120 A for 16.6 ms
Maximum I ² t for fusing	60 A ² .S for 8.33 ms at 60 Hz 66 A ² .s for 10 ms at 50 Hz
Co-ordination type	Type 1 - 13 A miniature circuit breaker (MCB) - curve B Type 2 - 10 A miniature circuit breaker (MCB) - curve 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
Insulation resistance	1000 MOhm at 500 V DC
Maximum capacitance	8 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 mm ² , (AWG 24...AWG 12) with cable end for input Screw terminals: 0.5...5.26 mm ² , (AWG 20...AWG 10) with cable end for output Screw terminals: 0.2...3.3 mm ² , (AWG 24...AWG 12) without cable end for input Screw terminals: 0.5...8.26 mm ² , (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	1.03 °C/W junction to case

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Thermal pad impedance	0.48 °C-in ² /W at 25 psi
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	EAC[RETURN]CSA[RETURN]UL[RETURN]CE
Marking	EAC UL CE CSA
Standards	UL 508 IEC 62314 IEC 60950-1 CSA C22.2 No 14-13

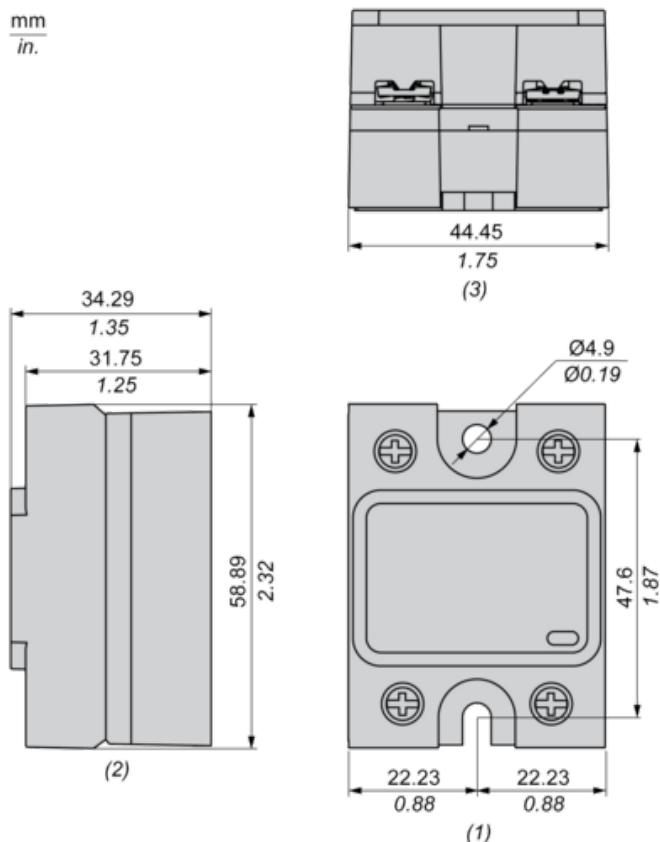
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.8 cm
Package 1 Width	4.8 cm
Package 1 Length	6.5 cm
Package 1 Weight	100.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.267 kg

Offer Sustainability

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

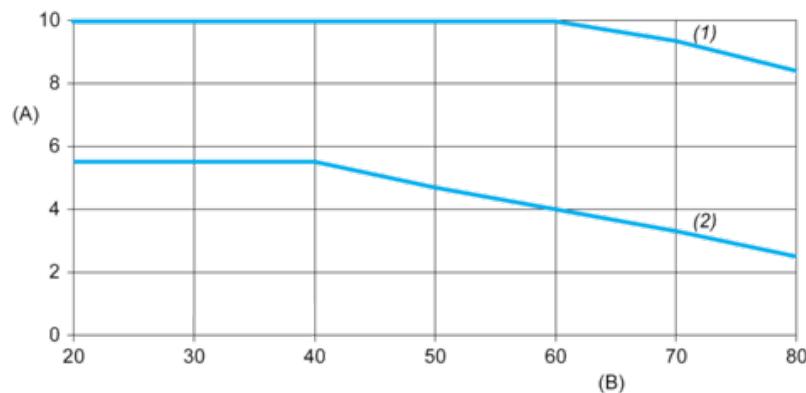


(1) Front view

(2) Side view

(3) Bottom view

Derating Curves



A : Load Current (Amps)

B : Ambient Temperature (°C)

(1) For Heatsink SSRHP25

(2) No Heatsink