Product data sheet

Specifications



single phase relay, Harmony Solid State Relays, 40A, panel mount, DC switching, thermal pad, input 3.5 to 32V DC, output 1 to 150V DC

SSP1D440BDT

Main

| Range Of Product | Harmony Solid State Relays | |
|---------------------------|-------------------------------|--|
| Provided Accessory | Thermal pad | |
| 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 | Mosfet output DC switching | |
| Output Switching Mode | DC switching | |

Complementary

| j | |
|---|--|
| 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 | 1015 mA |
| Load Current | 0.00140 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 | 1.51.7 N.m for input 22.2 N.m for output |

| Connections - Terminals | Screw terminals: 0.23.3 mm ² , (AWG 24AWG 12) with cable end for input Screw terminals: 0.55.26 mm ² , (AWG 20AWG 10) with cable end for output Screw terminals: 0.23.3 mm ² , (AWG 24AWG 12) without cable end for input Screw terminals: 0.58.26 mm ² , (AWG 20AWG 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 | |
| Thermal Pad Impedance | 0.48 °C-in²/W at 25 psi | |
| Led Indicator | LED, green for input | |
| Ip Degree Of Protection | IP20 | |
| Safety Reliability Data | B10d = 1731395 MTTFd = 1875.9 years | |
| Net Weight | 89.2 g | |
| Device Presentation | Complete product | |

Environment

| Ambient Air Temperature For Operation | -4080 °C |
|--|--|
| Ambient Air Temperature For Storage | -40125 °C |
| Pollution Degree | 2 |
| Overvoltage Category | III |
| Product Certifications | UL CE CSA EAC |
| Marking | EAC CSA UL CE |
| Standards | CSA C22.2 No 14-13 UL 508 IEC 62314 IEC 60950-1 |

Packing Units

| Unit Type Of Package 1 | PCE |
|------------------------------|-----------|
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 3.800 cm |
| Package 1 Width | 4.800 cm |
| Package 1 Length | 6.500 cm |
| Package 1 Weight | 105.000 g |
| Unit Type Of Package 2 | S01 |
| Number Of Units In Package 2 | 30 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 15.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 3.500 kg |

Sustainability

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Eq

Transparency RoHS/REACh

Well-being performance

 Reach Free Of Svhc

 Toxic Heavy Metal Free

 Mercury Free

 Rohs Exemption Information

 Yes

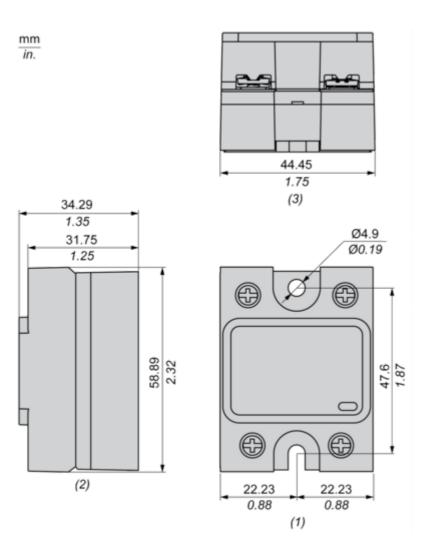
Certifications & Standards

| Reach Regulation | REACh Declaration |
|---------------------------|--|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| China Rohs Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| 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 |

Product data sheet

Dimensions Drawings

Dimensions



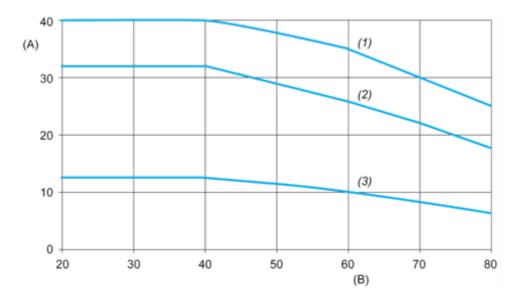
(1) Front view

(2) Side view

(3) Bottom view

Performance Curves

Derating Curves



A : Load Current (Arms)

B : Ambient Temperature (°C)

(1) For Heatsink SSRHD10

(2) For Heatsink SSRHP17

(3) No Heatsink