



| SDI SERIES

PCB MOUNT SOLID STATE RELAYS



Features

- 16 Pin DIP SSR
- Ratings to 1.5A @ 280 VAC
- SCR output
- Current control input
- Zero-crossing (resistive loads) or random-fire (inductive loads) output

PRODUCT SELECTION

Control Voltage	1.5 A	1.5 A
10-35mA	SDI2415	SDI2415R

SPECIFICATIONS ¹

Output

Operating Voltage (47-63Hz) [Vrms]	12-280
Transient Overvoltage [Vpk]	600
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.01
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/sec] ⁽³⁾	500
Maximum Load Current [Arms] ⁽³⁾	1.5
Minimum Load Current [Arms]	0.025
Maximum Surge Current (16.6ms) [Apk]	30
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.2
Minimum Power Factor (with Maximum Load)	0.5

Input

Description	SDI
Control Voltage Range	-
Control Current Range	10-32 mA
Must Turn On Voltage	-
Must Turn On Current	10 mA
Must Turn Off Voltage	-
Must Turn Off Current	1.0 mA
Typical Input Current @ 5 VDC	-

Nominal Input Impedance [Ohm]	-
Maximum Turn-On Time [msec] ⁽⁴⁾	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle

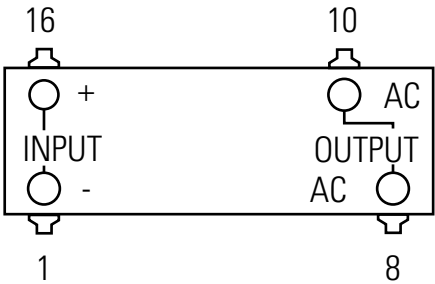
General

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz) ⁽²⁾	3750 Vrms
Minimum Insulation Resistance (@ 500 V DC) ⁽²⁾	10 ⁹ Ohms
Maximum Capacitance, Input/Output	2.0 pF
Ambient Operating Temperature Range	-30°C to 80°C
Ambient Storage Temperature Range	-30°C to 125°C
Weight (typical)	0.10 oz. (2.9g)
Encapsulation	Thermally Conductive Epoxy

GENERAL NOTES

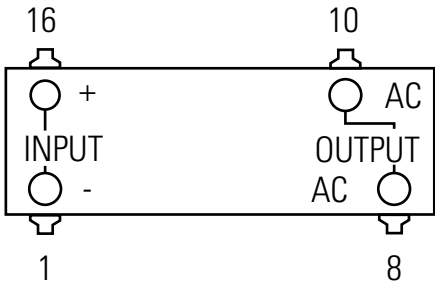
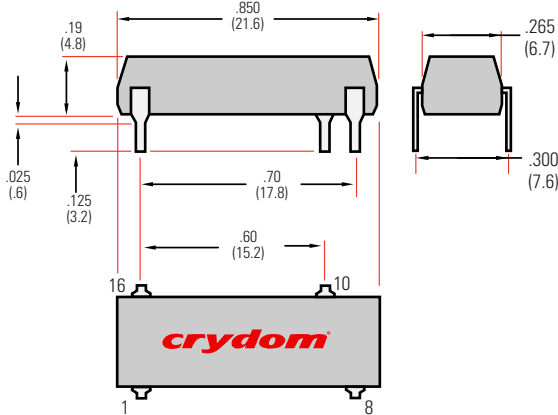
- ⁽¹⁾ All parameters at 25¼°C unless otherwise specified.
- ⁽²⁾ Dielectric and insulation resistance are measured
- ⁽³⁾ Off-State dv/dt test method per EIA/NARM standard RS-443

WIRING DIAGRAM



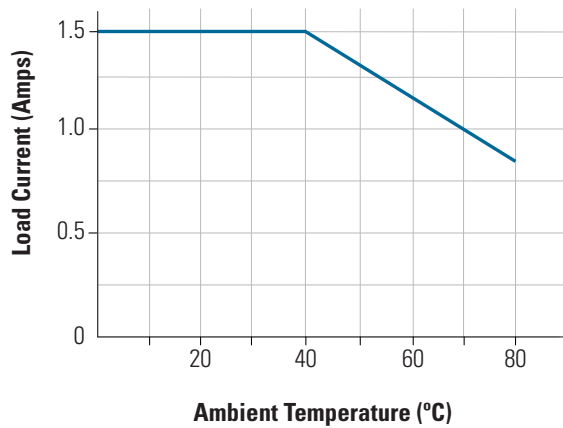
MECHANICAL SPECIFICATIONS

Tolerances: ±0.02 in / 0.5 mm
 All dimensions are in: inches [millimeters]



DC CONTROL
 PIN 8: AC LOAD
 PIN 10: AC LOAD
 PIN 16: +DC CONTROL PIN 1: -DC CONTROL

THERMAL DERATE INFORMATION



Max. Load Current vs. Temp.

AGENCY APPROVALS & CERTIFICATIONS



UL 116950
CSA LR81689

WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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