



## | SDV SERIES

PCB MOUNT SOLID STATE RELAYS



### Features

- 16 Pin DIP SSR
- Ratings to 1.5 A @280 VAC
- SCR Output
- 3.5-10 Vdc control output
- Zero-crossing (resistive loads) or random-fire (inductive loads) output

### PRODUCT SELECTION

Control Voltage	1.5 A	1.5 A
3.5-10 VDC	SDV2415	SDV2415R

### SPECIFICATIONS

#### Output <sup>(A)</sup>

Description	
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] <sup>(C)</sup>	500
Maximum Load Current [Arms] <sup>(C)</sup>	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

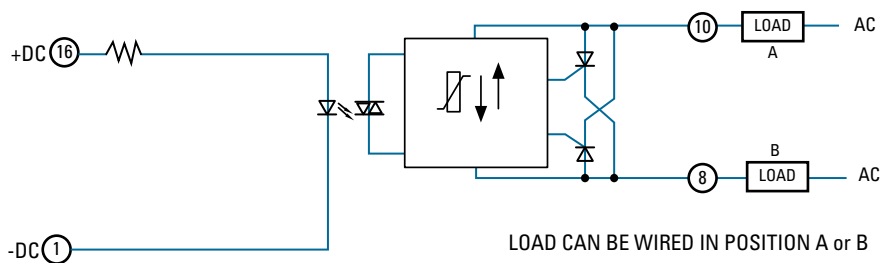
## Input <sup>(A)</sup>

Description	SDV
Control Voltage Range	3.5-10 Vdc
Control Current Range	-
Must Turn On Voltage	3.5 Vdc
Must Turn On Current	-
Must Turn Off Voltage	1.0 Vdc
Must Turn Off Current	-
Typical Input Current @ 5 VDC	15 mAdc
Nominal Input Impedance [Ohm]	270 Ohm
Maximum Turn-On Time [msec]	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle

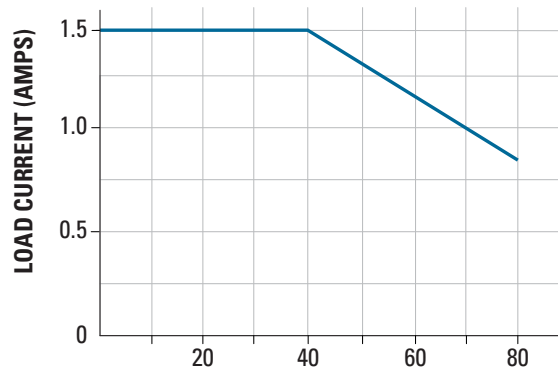
## General <sup>(A)</sup>

Description	Parameters
Dielectric Strength, Input/Output to Baseplate (50/60Hz) <sup>(B)</sup>	3750 Vrms
Minimum Insulation Resistance (@ 500 VDC) <sup>(B)</sup>	10.9 Ohms
Maximum Capacitance, Input/Output	2.0 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-30 to 125°C
Weight (typical)	0.10 oz (2.9 g)
Encapsulation	Thermally Conductive Epoxy

## WIRING DIAGRAM

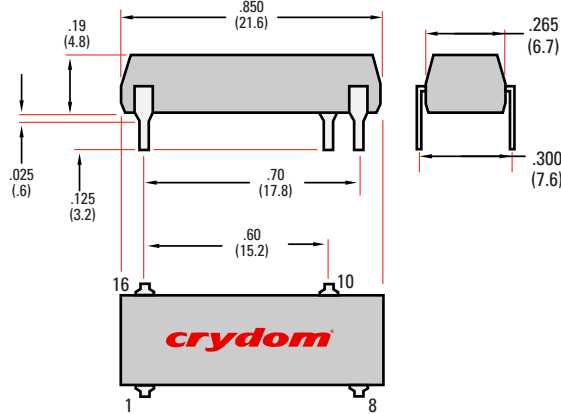


## THERMAL DERATE INFORMATION



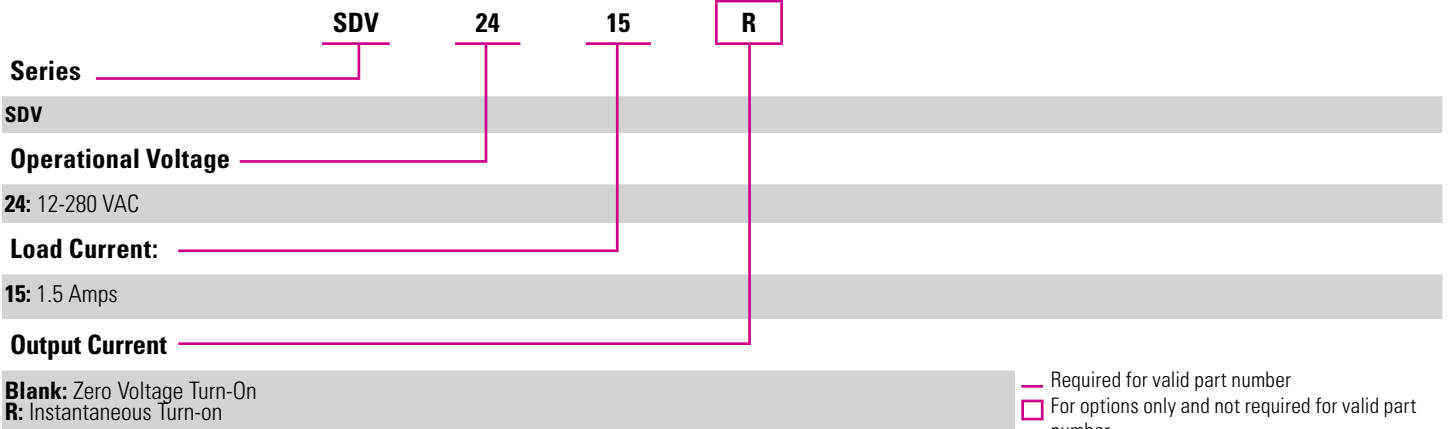
## MECHANICAL SPECIFICATIONS

Tolerances:  $\pm 0.02$  in / 0.5 mm  
All dimensions are in millimeters [inches]



## ORDERING OPTIONS

Example : SDV2415R



## GENERAL NOTES

- (A) All parameters at 25 $\frac{1}{4}$  °C unless otherwise specified
- (B) Dielectric and insulation resistance are measured
- (C) Off-State dv/dt test method per EIA/NARM standard RS-443

## AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314



## 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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