



## DMO SERIES

PCB MOUNT SOLID STATE RELAYS



### Features

- Mini-SIP SSR
- Ratings to 3A @ 60 VDC
- MOSFET Output
- DC Control
- Low On-state Impedance

### PRODUCT SELECTION

|                 |        |
|-----------------|--------|
| Control Voltage | 3A     |
| 3-10 VDC        | DMO063 |

### SPECIFICATIONS

#### Output Specifications <sup>(1)</sup>

| Description                                                  | DMO063             |
|--------------------------------------------------------------|--------------------|
| Operating Voltage Range [Vdc]                                | 0-60               |
| Maximum Off-State Leakage Current @ Rated Voltage [ $\mu$ A] | 100                |
| Maximum Load Current [Adc]                                   | 3.0                |
| Minimum Load Current [Adc]                                   | 0                  |
| Maximum Surge Current [Adc]                                  | 12 (10 msec)       |
| Maximum On-State Voltage Drop @ Rated Current [VDC]          | 0.4 <sup>(2)</sup> |

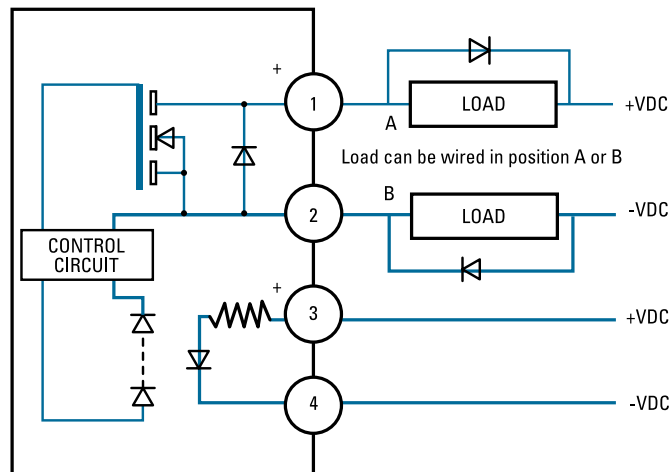
## Input Specifications <sup>(1)</sup>

| Description                   | DM0063   |
|-------------------------------|----------|
| Control Voltage Range         | 3-10 VDC |
| Must Turn On Voltage          | 3.0 VDC  |
| Must Turn Off Voltage         | 1.0 VDC  |
| Typical Input Current @ 5 VDC | 20 mA    |
| Nominal Input Impedance       | 270 Ohms |
| Maximum Turn-On Time [μsec]   | 300      |
| Maximum Turn-Off Time [μsec]  | 200      |

## General Specifications

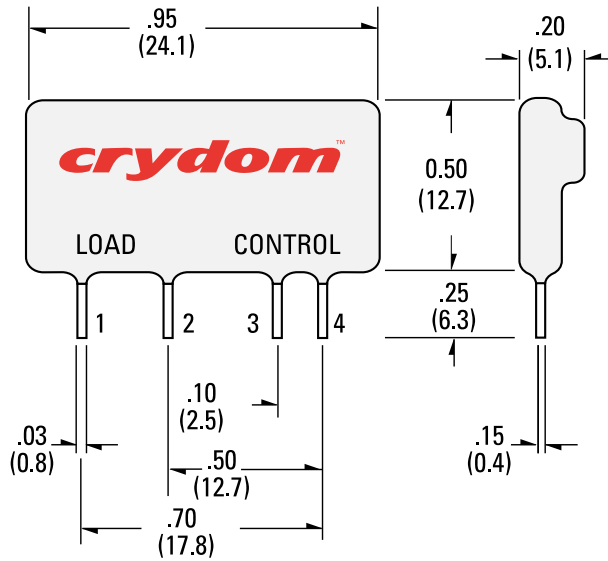
| Description                                                      | Parameters                 |
|------------------------------------------------------------------|----------------------------|
| Dielectric Strength, Input/Output/Base (50/60 Hz) <sup>(3)</sup> | 2500 Vrms                  |
| Minimum Insulation Resistance (@ 500 VDC) <sup>(3)</sup>         | 10 <sup>9</sup> Ohms       |
| Maximum Capacitance, Input/Output                                | 8 pF                       |
| Ambient Operating Temperature Range                              | -30° to 80°C               |
| Ambient Storage Temperature Range                                | -30° to 125°C              |
| Weight (typical)                                                 | 0.15 oz. (4.3 g)           |
| Encapsulation                                                    | Thermally Conductive Epoxy |

## WIRING DIAGRAM <sup>(4)</sup>

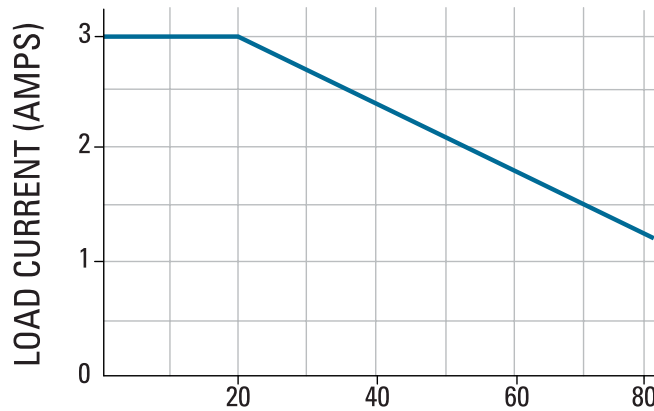


## MECHANICAL SPECIFICATIONS

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



## THERMAL DERATE INFORMATION



DMO Max. Load Current vs.Temp

# ORDERING OPTIONS

Example : DM0063

Series DM0 063

DM0: FET Output

Load Current

063: 3 Amps

- Required for valid part number
- For options only and not required for valid part number

# GENERAL NOTES

- (1) All parameters at 25°C unless otherwise specified.
- (2) Typical On-State Resistance = 0.13 ohms
- (3) Dielectric and insulation resistance are measured between input and output.
- (4) Inductive loads should be diode suppressed.

For additional information or specific questions, contact Sensata Technical Support.

# 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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