

Series 1-DC



- MOSFET output
- Ratings from 60A to 100A @ 100 VDC
- DC control
- Relays are easily paralleled for higher-current applications

PRODUCT SELECTION

Control Voltage	60A	80A	100A
3.5-32 VDC	D1D60	D1D80	D1D100

OUTPUT SPECIFICATIONS (1)

Description	D1D60	D1D80	D1D100
Operating Voltage [Vdc]	0-100 VDC	0-100 VDC	0-100 VDC
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.2	0.3
Maximum On-State Resistance @ Rated Current [RDS-ON][Ohms]	0.010	0.008	0.005
Maximum Load Current (3) [A dc]	60	80	100
Minimum Load Current [mA]	5	5	5
Maximum Surge Current [A dc] (10ms)	180	220	330
Maximum On-State Voltage Drop @ Rated Current [Vdc]	0.6	0.7	0.5
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.6	0.47	0.32

INPUT SPECIFICATIONS (1)

Description	DC Control
Control Voltage Range	3.5-32 VDC
Minimum Turn-On Voltage	3.5 VDC
Minimum Turn-Off Voltage	1.0 VDC
Maximum Input Current	1.6 mA (5 VDC), 28 mA (32 VDC)
Nominal Input Impedance	See Note 4
Maximum Turn-On Time [µsec]	300
Maximum Turn-Off Time [msec]	1.0

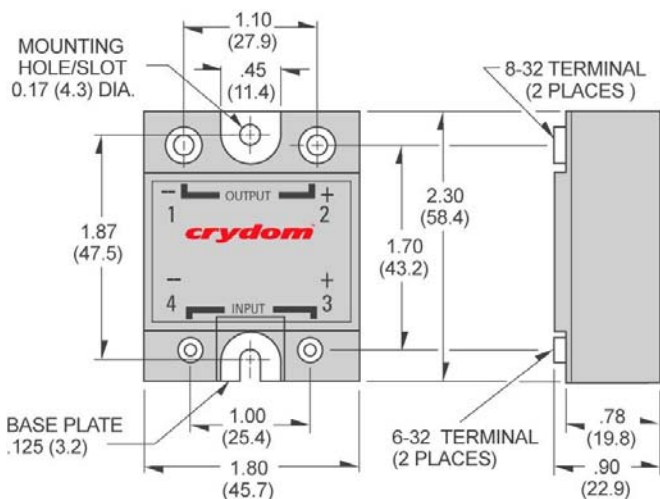
GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 V DC)	10 ⁹ Ohm
Maximum Capacitance, Input/Output	50 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	3.0 oz (86.5g)
Encapsulation	Thermally conductive Epoxy
Terminals	Screws and Saddle Clamps Furnished, Unmounted
Recommended Terminal Screw Torque Range:	6-32 Screws - 10 in lbs. 8-32 and 10-32 Screws -20 in. lbs. (Screws dry without grease)

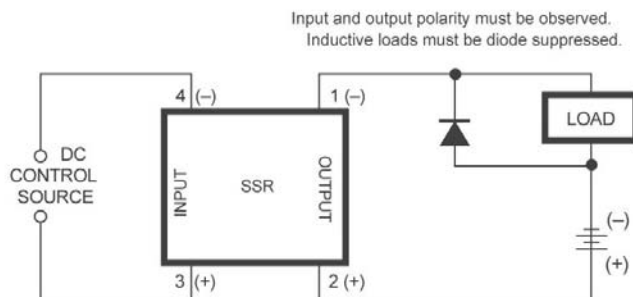
GENERAL NOTES

- 1) All parameters at 25°C and per section unless otherwise specified.
- 2) Dielectric strength and insulation resistance are measured between input and output
- 3) Heat sinking required, see derating curves.
- 4) Input circuitry version incorporates active current limiter.

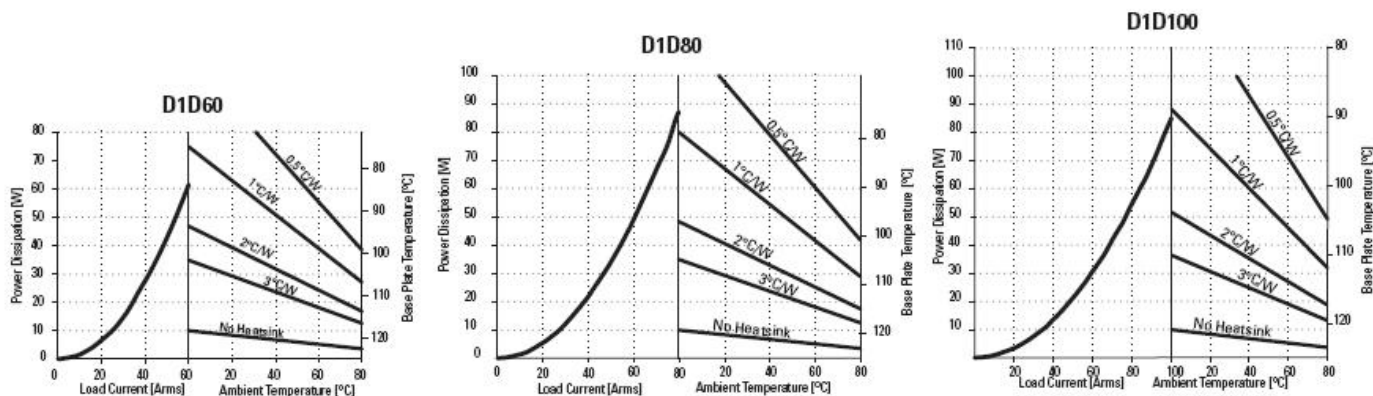
MECHANICAL SPECIFICATIONS



All dimensions are in inches (millimeters)



THERMAL DERATE INFORMATION



AGENCY APPROVALS



Rev. 032509