

- MOSFET Output
- Low On-State Resistance
- Paralleling Capability for Higher Currents
- Panel Mount
- Optically Coupled

DC output relays feature MOSFET technology for low on-state resistance, assuring easy paralleling and switching capabilities to 40 amps at 100 Vdc. Lower current models are also available to 500 Vdc. All models come in Crydom's standard panel-mount package. Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

## OUTPUT SPECIFICATIONS ①

MODEL NUMBERS	D1D07L	D1D12L	D1D20L	D1D40L	D2D07L	D2D12L	D4D07L	D4D12L	D5D07L	D5D10L
Operating Voltage Range [Vdc]	0-100	0-100	0-100	0-100	0-200	0-200	0-400	0-400	0-500	0-500
Max. Load Current ③ [Adc]	7	12	20	40	7	12	7	12	7	10
Min. Load Current [mA]	20	20	20	20	20	20	20	20	20	20
Max. Surge Current, [Adc] (10msec)	15	28	42	106	22	27	17	36	19	29
Max. On-State Voltage Drop @ Rated Current [Vdc]	2.0	1.6	2.1	2.1	2.0	2.8	4.2	4.2	5.7	5.5
Thermal Resistance Junction to Case [R <sub>qJC</sub> ] °C/W	2.2	1.34	1.06	0.83	1.5	1.06	1.06	0.8	1.0	0.8
Max On-state Resistance @ Rated Current (R <sub>DS-ON</sub> ) [Ohms]	.29	.13	.10	.05	.29	.23	.6	.35	.8	.55
Max. Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.2	0.3	0.3	0.1	0.3	0.3	0.3	0.2	0.3
Max. Turn-On Time [msec]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max. Turn-Off Time [msec]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

## INPUT SPECIFICATIONS ①

	DC CONTROL
Control Voltage Range	3.5-32 Vdc
Maximum Turn-On Voltage	3.5 Vdc
Minimum Turn-Off Voltage	1.0 Vdc
Nominal Input Impedance	See Note 4
Typical Input Current	10mA ④

## GENERAL NOTES

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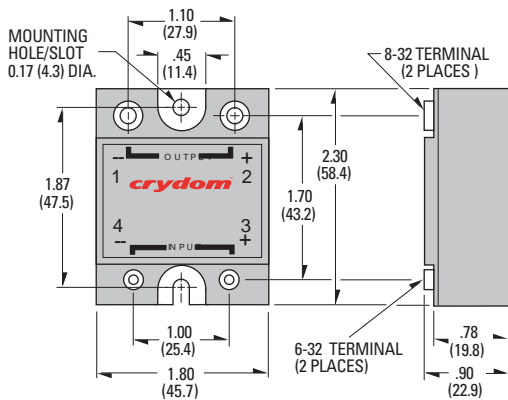
- ① All parameters at 25°C unless otherwise specified.
- ② Dielectric strength and insulation resistance are measured between input and output.
- ③ Heat sinking required, for derating curves see page 3.
- ④ Input circuitry incorporates active current limiter.

## GENERAL SPECIFICATIONS

Dielectric Strength 60Hz	2500 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 <sup>9</sup> Ohm
Max. Capacitance Input/Output	50 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

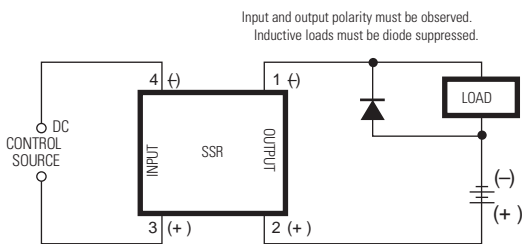
## MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (86.5g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	Screws and Saddle Clamps Furnished, Unmounted



All dimensions are in inches (millimeters)

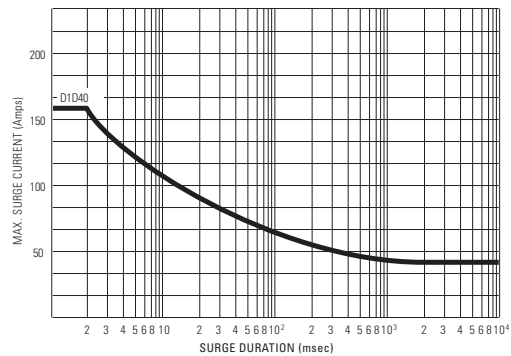
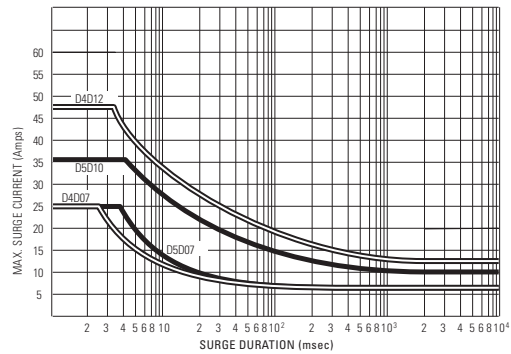
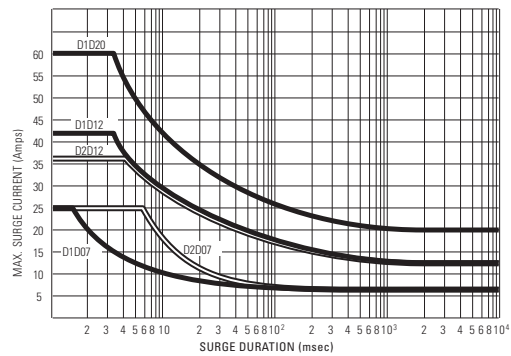
**Screw Torque Requirements:** 6-32 Screws - 10 in. lbs., 8-32 and 10-32 Screws - 20in. lbs. (Screws dry without grease.)



### Transient Protection

All loads are inductive, even ones that are not so labeled. An inductive load will produce harmful transient voltages when it is turned off. The more perfect the switch, the larger the transient voltages; the MOSFET output is so nearly an ideal switch that the transient voltages produced by seemingly "non-inductive" loads can cause damage if not suppressed. Diodes should be fast recovery type with PIV rated greater than supply voltage.

### MAXIMUM SURGE vs. DURATION



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For recommended applications and more information contact:

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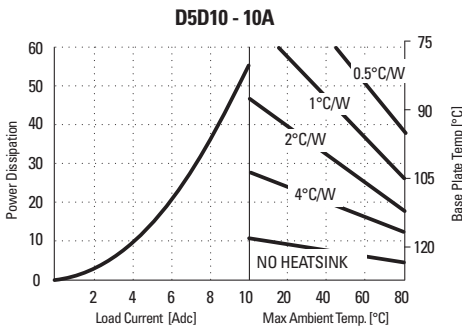
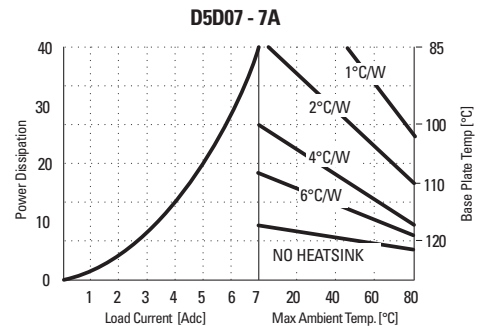
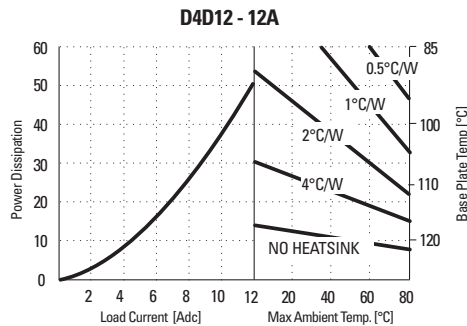
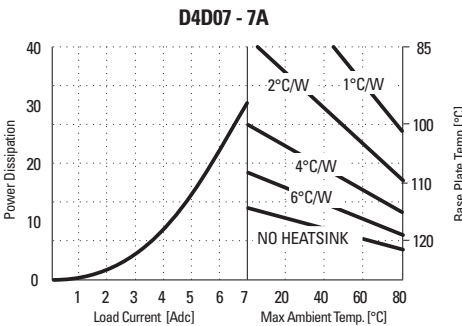
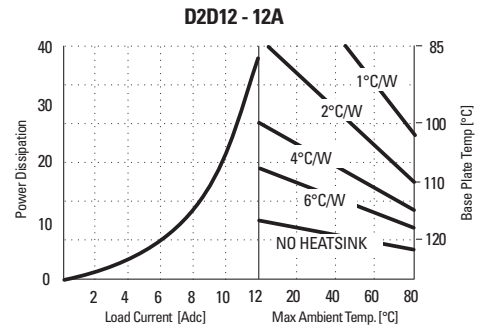
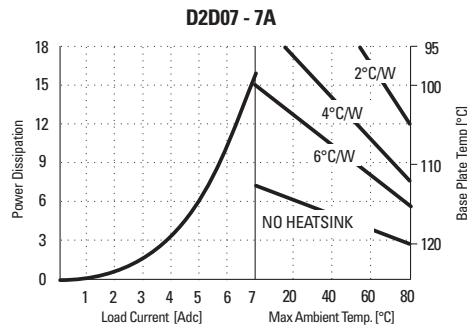
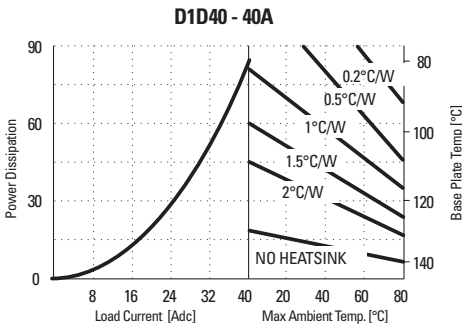
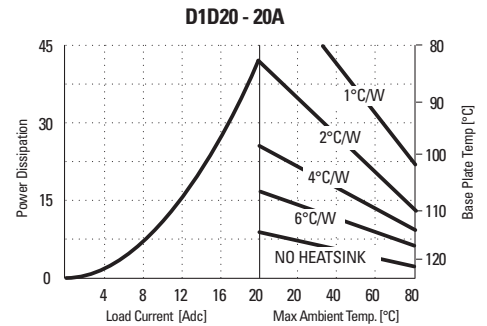
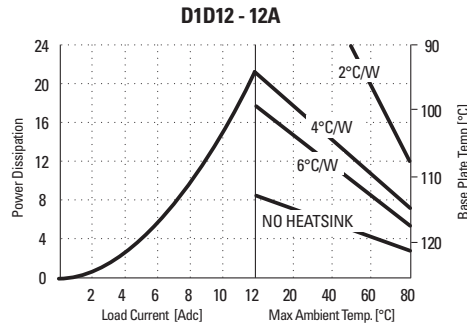
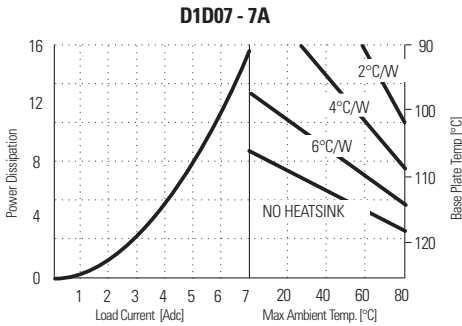
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Crydom Heat Sinks offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.

## CURRENT DERATING CURVES



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## ANNEX – ENVIRONMENTAL INFORMATION:

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

### 附件 - 环保信息:

此附件所标示的包括电子信息产品污染图标的环保信息符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**, 电子信息产品污染控制标识要求

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

