

### | CMX SERIES

### PCB MOUNT SOLID STATE RELAYS



### **Features**

- SIP SS R
- Ratings to 20A @ 60 VDC, 10A @ 100 VDC, 10A @ 60 VDC and 3A @ 200 VDC
- MOSFET output
- DC control
- Low on-state impedance
- CE Compliant to EN60950-1



## PRODUCT SELECTION

Control Voltage	3 A	5 A	6 A	10 A	10 A	20 A
3-10 VDC	CMX200D3	CMX60D5	CMX100D6	CMX60D10	CMX100D10	CMX60D20
20-28 VDC	CMXE200D3	CMXE60D5	CMXE100D6	CMXE60D10	CMXE100D10	CMXE60D20



## OUTPUT SPECIFICATIONS (1)(5)

Description	3 A	5 A	6 A	10 A	10 A	20 A
Operating Voltage [VDC]	0-200	0-60	0-100	0-60	0-100	0-60
Maximum Off-State Leakage Current @ Rated Voltage [μAdc]	100	100	100	100 (6)	100	100
Maximum Load Current [ADC]	3	5	6	10	10	20
Minimum Load Current [mADC]	2	2	2	2	2	2
Maximum On-State Resistance [Ohm] (2)	0.20	.10	.040	.018	.010	.0033
Maximum Surge Current (10msec) [Apk]	30	60	100	100	100	200
Maximum On-State Voltage Drop @ Rated Current [VDC]	0.6	0.5	0.24	0.18	0.1	0.1



# INPUT SPECIFICATIONS (1)

Description	СМХ	CMXE
Control Voltage Range	3-10 VDC	20-28 VDC
Maximum Turn-On Voltage	3.0 VDC	20 VDC
Minimum Turn-Off Voltage	1 .0 VDC	1 .0 VDC
Typical Input Current	15 mA @ 5 VDC	12 mA @ 24 VDC
Nominal Input Impedance	300 Ohms	780 Ohms
Maximum Turn-On Time [msec]	2.0	2.0
Maximum Turn-Off Time [msec]	600	600



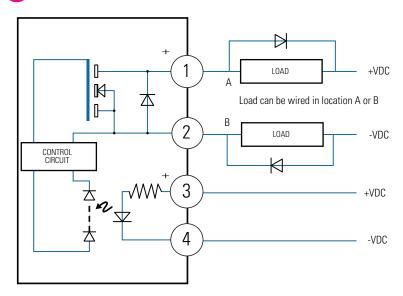
## GENERAL SPECIFICATIONS

Description	Parameters	
Dielectric Strength, Input/Output (50/60 Hz) (3)	2500 Vrms	
Minimum Insulation Resistance (@ 500 VDC) (3)	10º Ohms	
Maximum Capacitance, Input/Output	15 pF	
Ambient Operating Temperature Range (4)	-10°C to 80°C	
Ambient Storage Temperature Range (4)	-10°C to 125°C	
Weight (typical)	0.4 oz. (11 g)	
Encapsulation	Thermally Conductive Epoxy	
Enclosure and PCB	Meet the requirements of IEC60335-1	

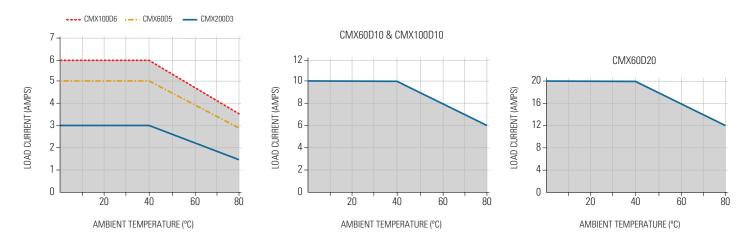
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# **WIRING DIAGRAM**

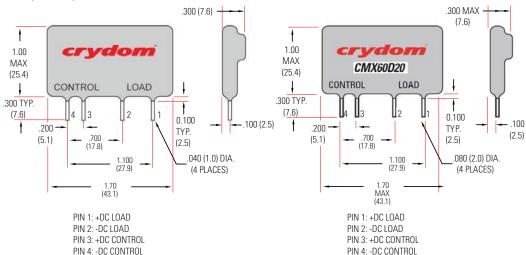


## THERMAL DERATE INFORMATION



## MECHANICAL SPECIFICATIONS

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



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Designed in accordance with the requirements of IEC 62314

EN60950: Meets the requirements of sections 1.5: 1,7: 2.9: 2.10.5.3: 4.2: 4.5: 4.7:

IEC60335-1: Resistance to heat and fire meets the requirements of section 30, evaluated by TUV SUD. Glow Wire Test, per requirements of IEC/EN 60695-2-10 and IEC/EN 60695-2-11 Ball Pressure Test, per requirements of IEC/EN 60695-10-2









### **GENERAL NOTES**

- 1)All parameters at 25°C unless otherwise specified.
- 2) At rated current (RDS-ON).
- 3)Dielectric and insulation resistance are measured between input and output.
- 4)Low temperature range is limited to -10°C in 20 Amps models.
- 5)Inductive loads should be diode suppressed.
- 6) At 55 VDC



### **WARNINGS**



### RISK OF M ATERIAL 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 ARCH FLASH

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

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

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