

Solid State Relay
MSR-SD Series Single Phase AC Output

Product Data Sheet



- Zero crossing or random-on switching
- Ratings from 5A @ 24-530VAC
- Control voltage: 15-32VDC And 4-32VDC
- Dielectric Strength: 4000VACrms
- TRIAC output(3A) or SCR output(5A)
- RoHS compliant
- Built-in RC Snubber Circuit
- PCB Mounted

MSR	—	SD	380	D	5	Z	H
	Packing: - : Bulk Packing A-Z	SD Series	Load Voltage 240:240VAC 380:380VAC 480:480VAC	Control Voltage D:DC Control	Load Current 5:5Amp	Switching Mode Z:Zero crossing R:Random-on	Control Voltage H:15-32VDC W:4-32VDC

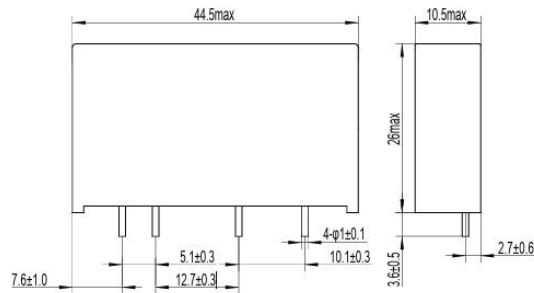
INPUT CIRCUIT (TA=25°C)		
Control Voltage Range	-H	15-32VDC
	-W	4-32VDC
Must Turn-on Voltage	-H	15VDC
	-W	4VDC
Must Turn-off Voltage	-H	5VDC
	-W	1VDC
Maximum Input Current	H/W	25mA (@32VDC)

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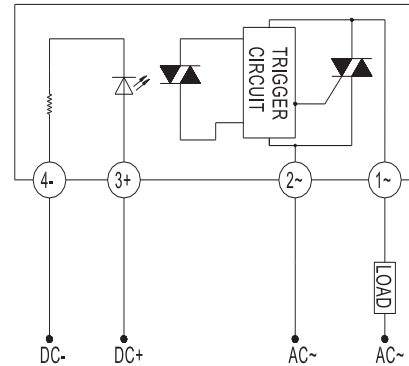
OUTPUT CIRCUIT (TA=25°C)		
Load Voltage Range	240VAC	24~280VAC
	380VAC	24~440VAC
	480VAC	24~530VAC
Transient Overvoltage	240VAC	600Vpk
	380VAC	800Vpk
	480VAC	1200Vpk
Load Current Range	5A	0.1~5A
Maximum Turn-On Time	Random-On	1ms
	Zero Crossing	1/2 cycle+1ms
Maximum Turn-Off Time		1/2 cycle+1ms
Maximum Surge Current [@10 ms]	5A	250A
Maximum Off-State Leakage Current [@ Rated Voltage]		5mA
Maximum On-State Voltage Drop [@ Rated Current]		1.5Vrms
Minimum Off-State dv/dt [@ Maximum Rated Voltage]	5A	500V/μs
GENERAL INFORMATION (TA=25°C)		
Dielectric Strength, Input/Output[50/60Hz]	Input/Output	4000VACrms
Insulation Resistance (@500VDC)		1000MΩ(@500VDC)
Ambient Operating Temperature Range		-30°C +80°C
Ambient Storage Temperature Range		-30°C +100°C
Weight [Typical]		20g

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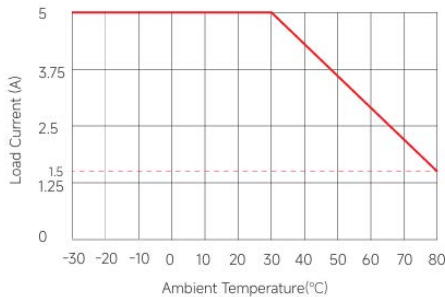
Installation



Wiring Diagram



Thermal Curve



Warnings

1. The product's side panels may be hot, allow the product to cool before touching.
2. Disconnect all power before installing or working with this equipment.
3. Verify all connections and replace all covers before turning on power

Important Notice

1. Soldering must be finished within 10 seconds at 260°C, or finished within 5 seconds at 350°C. Otherwise it may cause damage to the relay.
2. Terminal polarity must be observed. Otherwise it may cause damage to the relay.
3. When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.

Product Certification



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