Solid State Relay
KSMA Series Single Phase AC Output

- TTL,COMS drive compatible
- Optoelectronic isolation
- Control voltage: 5VDC, 12VDC, 24VDC
- DIN rail mounted
- Standard footprint package
- Dielectric strength≥2500VACrms
- ROHS compliant

Product Description

KSMA series is AC output solid state relay with small size.The control voltage is 5VDC,12VDC and 24VDC.Output current is 1A and 2A,output voltage is 240VAC.Suitable for high density PCB mounted or PLC control applications.

Product Selection

KSM	A	240	D	1	R	-5	D
KSM Series	Load Type A:AC Load	Load Voltage 240:240VAC	DC Control	Load Current 1: 1Amp 2: 2Amp	Switching Mode None:Zero Crossing R:Random-on	Control Voltage 5: 5VDC 12: 12VDC 24: 24VDC	None:Without Socket D:With Socket

Description	1A		2A	
5	KSMA240D1-5	KSMA240D1R-5	KSMA240D2-5	KSMA240D2R-5
	KSMA240D1-5D	KSMA240D1R-5D	KSMA240D2-5D	KSMA240D2R-5D
12	KSMA240D1-12	KSMA240D1R-12	KSMA240D2-12	KSMA240D2R-12
	KSMA240D1-12D	KSMA240D1R-12D	KSMA240D2-12D	KSMA240D2R-12D
24	KSMA240D1-24	KSMA240D1R-24	KSMA240D2-24	KSMA240D2R-24
	KSMA240D1-24D	KSMA240D1R-24D	KSMA240D2-24D	KSMA240D2R-24D

Technical Specification

Input Circuit

Control Voltage Range	5	4-6VDC
	12	10-15VDC
	24	20-30VDC
Minimum Turn-On Voltage	5	4VDC
	12	10VDC
	24	20VDC
Minimum Turn-Off Voltage	5	1VDC
	12	3VDC
	24	10VDC

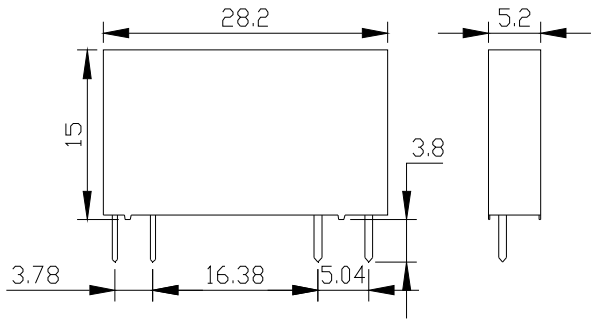
Maximum Input Current		25mA
Output Circuit		
Load Voltage Range		48-280VAC
Maximum Transient Voltage		600Vpk
Load Current Range	1	0.1 - 1A
	2	0.1 - 2A
Maximum Turn-On Time	Random-On	1ms
	Zero Crossing	1/2AC Cycle + 1ms
Maximum Turn-Off Time		1/2AC Cycle + 1ms
Maximum Surge Current [@10 ms]	1	30A
	2	80A
Maximum Off-State Leakage Current [@ Rated Voltage]		1.5mA
Maximum On-State Voltage Drop [@ Rated Current]		1.2Vrms
Minimum Off-State dv/dt[@ Maximum Rated Voltage]		200V/μs
General Information		
Dielectric Strength, Input/Output(50/60Hz)		⩾2500Vrms
Insulation Resistance		1000MΩ(@500VDC)
Vibration		10-55Hz 1.5mm double-amplitude
Shock		Acceleration 980m/s^2 pulse duration 6ms
Ambient Operating Temperature Range		-30℃ ～ +80℃
Ambient Storage Temperature Range		-30℃ ～ +100℃
Weight (typical)	KSMA….-.	4g
	KSMA….-.D	30g

Application

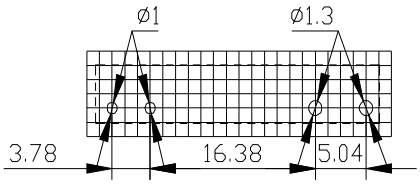
Suitable for high density PCB mounted or PLC control applications.

Installation

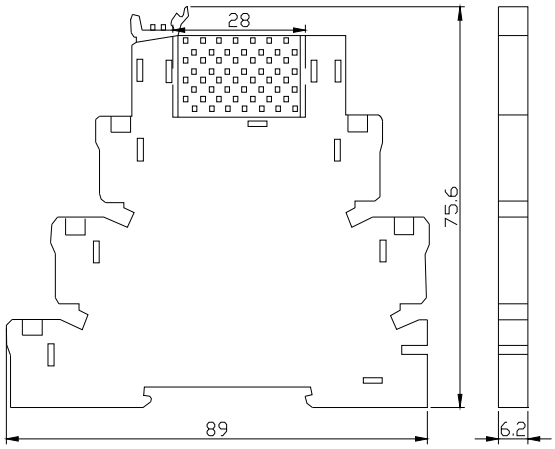
Dimension Figure



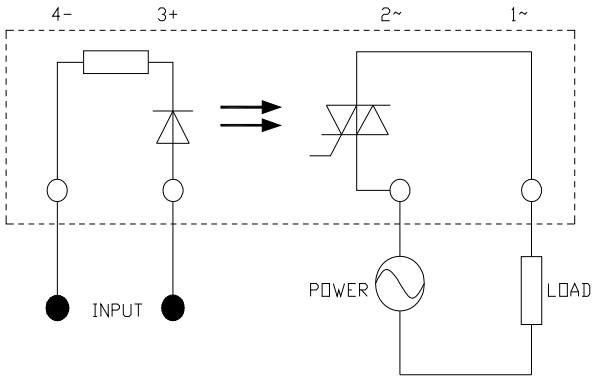
PCB Mounted Figure



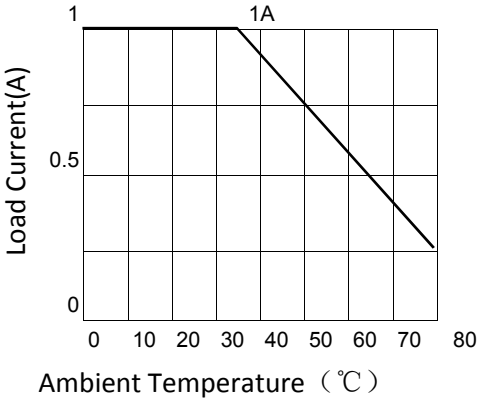
Socket Installation Drawing(Type：KPD-1A)

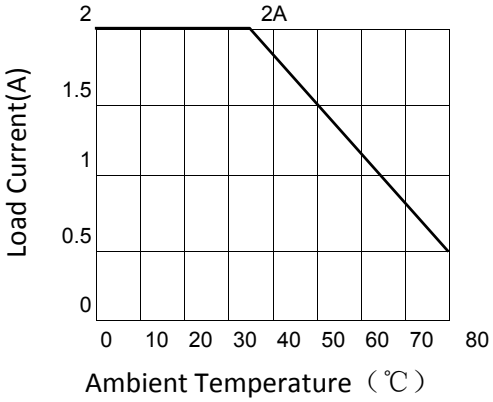


Wiring Method

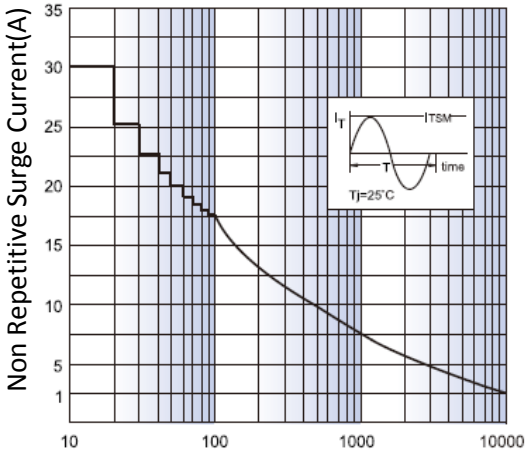


Thermal Curve

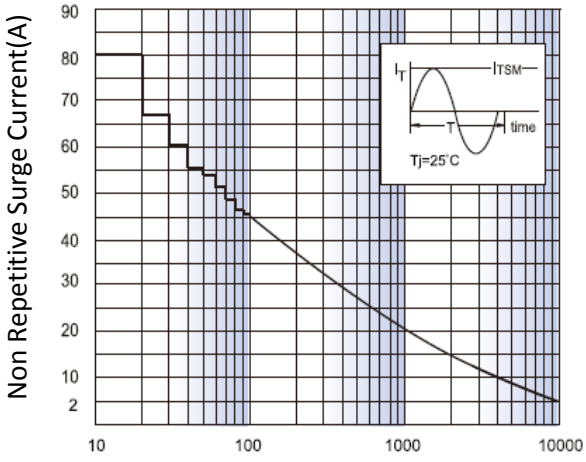




Non Repeative Surge Current And Surge Cycle Curve（1A）



Non Repeative Surge Current And Surge Cycle Curve（2A）



Important Notice

1. Consideration of heating disspation,load current will be decreased without enough ventilation.
2. Terminal polarity to ensure proper control, or may damage the product.
3. The piezoresistor should be in parallel at the output when the relay transient voltage is too high.

Product Certification

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