

Solid State Relay

KSMA Series Single Phase AC Output



- TTL,COMS drive compatible
- Optoelectronic isolation
- Control voltage: 5VDC, 12VDC, 24VDC
- Dielectric Strength $\geq 2500\text{VACrms}$
- ROHS compliant
- PCB mounted

Product Description

KSMA series is AC output solid state relay with compact size. The control voltage is 5VDC, 12VDC and 24VDC. Output current is 1A and 2A, output voltage is 240VAC and 380VAC. Suitable for high density PCB mounted or PLC control applications.

Product Selection

KSM	A	240	D	1	R	-5	M/D
KSM Series	Load Type A: AC Load	Load Voltage 240: 240VAC 380: 380VAC	DC Control	Load Current 1: 1Amp 2: 2Amp	Switch Mode None: Zero-crossing R: Random-on	Control Voltage 5: 5VDC 12: 12VDC 24: 24VDC	M: MOV Protection (240VAC) D: DIN Rail

Description	1A	2A
5	KSMA240D1-5	KSMA240D2-5
	KSMA240D1R-5	KSMA240D2R-5
	KSMA240D1-5M	
	KSMA380D1-5	
12	KSMA240D1-12	KSMA240D2-12
	KSMA240D1R-12	KSMA240D2R-12
	KSMA240D1-12M	
	KSMA380D1-12	
24	KSMA240D1-24	KSMA240D2-24
	KSMA240D1R-24	KSMA240D2R-24
	KSMA240D1-24M	
	KSMA380D1-24	

Technical Specification

Input Circuit

Control Voltage Range	5	4-6VDC
	12	10-14VDC
	24	20-28VDC

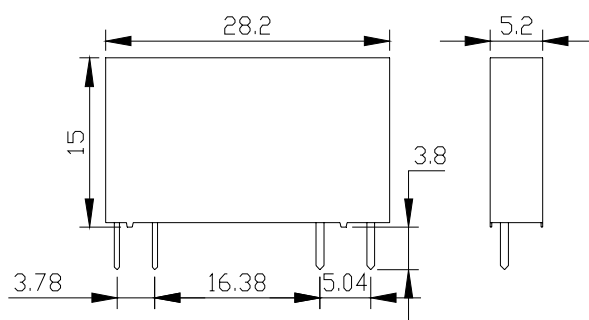
Minimum Turn-On Voltage	5	4VDC
	12	10VDC
	24	20VDC
Minimum Turn-Off Voltage	5	1VDC
	12	3VDC
	24	10VDC
	Random-On	1VDC
Maximum Input Current		25mA
Output Circuit		
Line Voltage Range	240VAC	48-280VAC
	380VAC	48-440VAC
Maximum Transient Voltage	240VAC	600Vpk
	380VAC	800Vpk
Load Current Range	1	0.1 - 1A
	2	0.1 - 2A
Maximum Turn-On Time	Random-On	1ms
	Zero-On	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]		100V/μs
General Information		
Dielectric Strength, Input/Output/Base (50/60Hz)	240VAC	≥2500Vrms
	380VAC	≥4000Vrms
Insulation Resistance		1000MΩ(@500VDC)
Vibration		10-55Hz 1.5mm double-amplitude
Shock		Acceleration 980m/s ² , pulse duration 6ms
Ambient Operating Temperature Range		-30°C ~ +80°C
Ambient Storage Temperature Range		-30°C ~ +100°C
Weight (typical)	KSMA....-	4g
	KSMA....-D	30g

Application

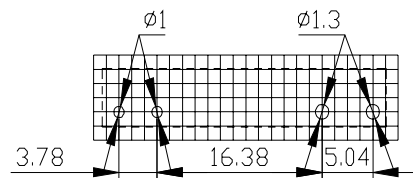
Suitable for high density PCB mounted or PLC control applications.

Installation

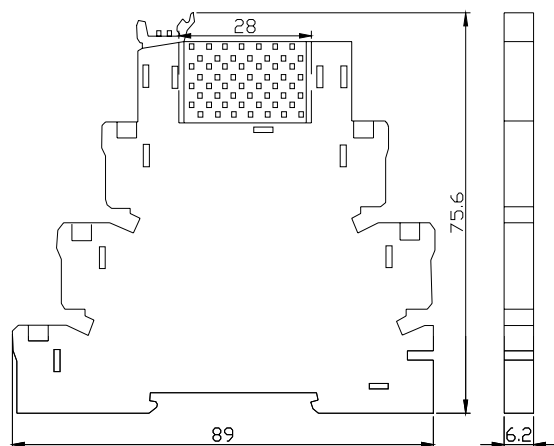
Dimension Figure



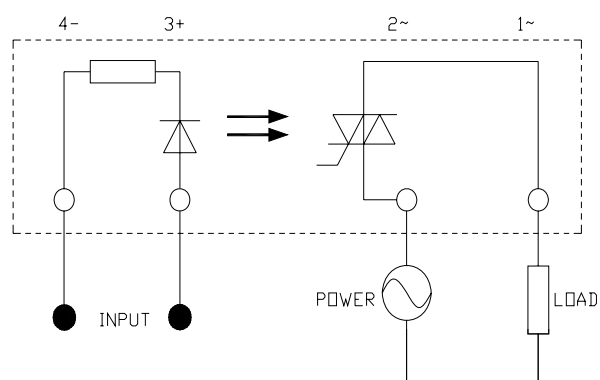
PCB Mounted Figure



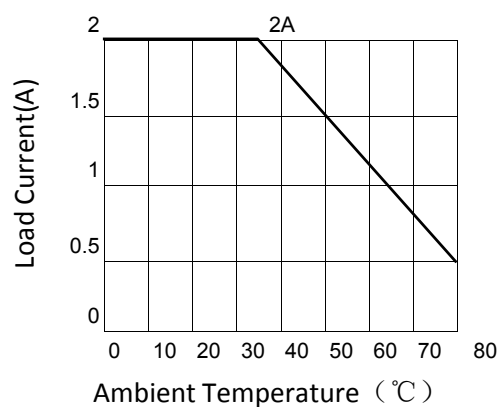
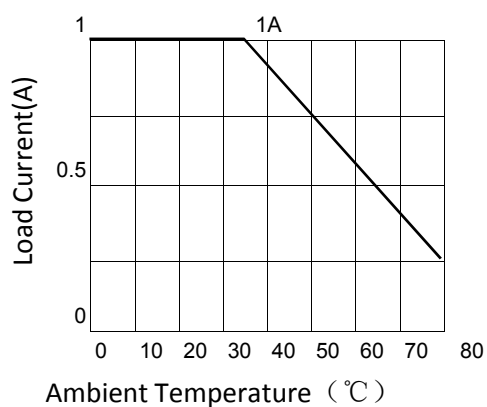
Socket Installation Drawing(Type: KPD-1A)



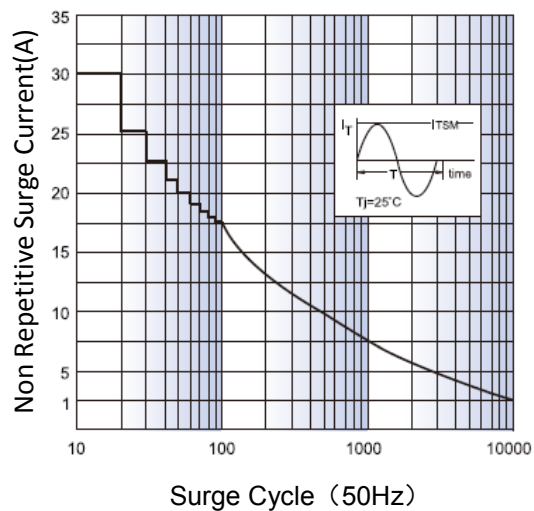
Wiring Method



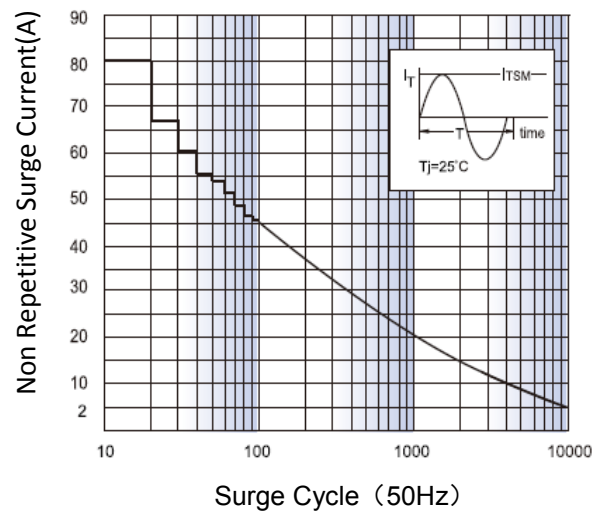
Thermal Curve



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



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



Important Notice

1. Consideration of heating dissipation, load current will decrease without enough ventilation.
2. Terminal polarity to ensure proper control, or may damage the product.

Product Certification

