Solid State Relay (Single Phase AC Output)	KSC

Features

● Opto-isolation
● Load current: 0.1A-2A @24-280VAC
● Control current or voltage: 10mA, 5VDC, 12VDC, 24VDC
● Dielectric strength: ≥2500VACrms
● PCB mounted
● RoHS compliant

1. DESCRIPTION

KSC series is printed board mounted solid state relay. Small volume with high EMC and high inrush current capability. Control current or voltage is 10mA, 5VDC, 12VDC and 24VDC, opto-isolation between input and output, output is zero crossing and random-on.

2. APPLICATION

Suitable for important industrial applications such as the control of electromagnetic valve, motor and incandescent lamp.

3. IMPORTANT NOTICE

1) Soldering must be finished within 10 seconds at 250℃, and finished within 5 seconds at 350℃.
2) Terminal polarity to ensure proper control, or may damage the product.

4. TECHNICAL SPECIFICATION

1) Input Circuit

Control Current/Voltage Range	I	10-35mA
	5VDC	4-6VDC
	12VDC	9.6-14.4VDC
	24VDC	19.2-28.8VDC
Minimum Turn-on Current/Voltage	I	10mA
	5VDC	4VDC
	12VDC	9.6VDC
	24VDC	19.2VDC
Minimum Turn-off Current	I	1.0mA
Minimum Turn-off Voltage	5, 12, 24VDC	1.0VDC
Maximum Input Current	5, 12, 24VDC	25mA

2) Output Circuit

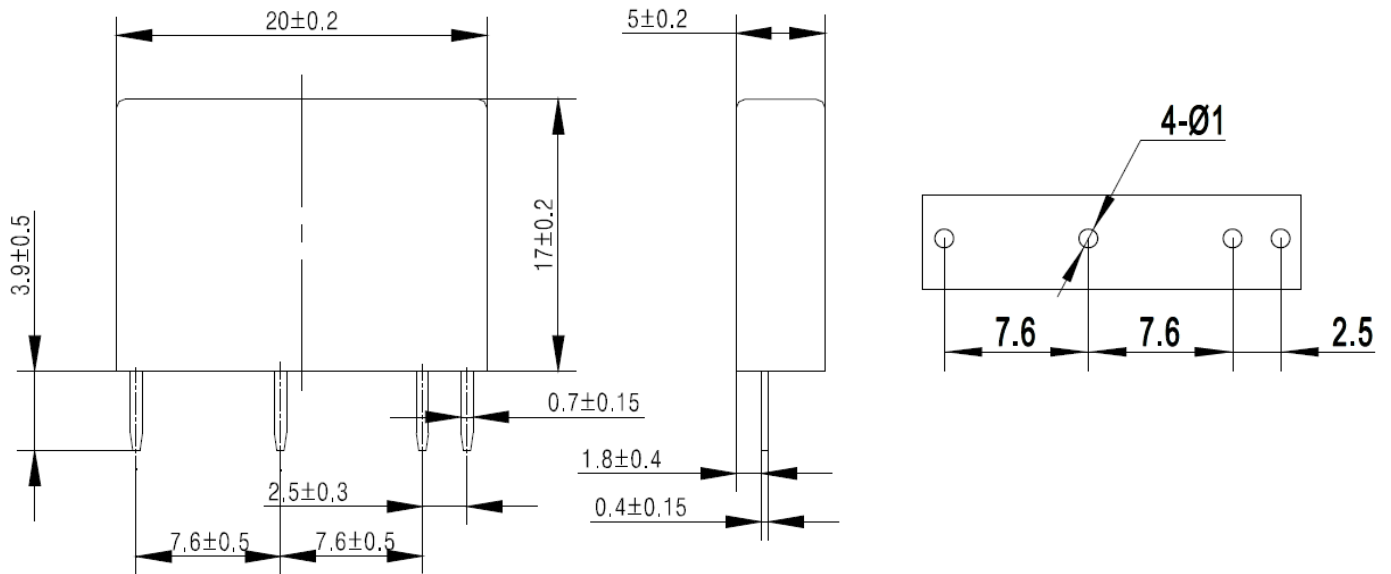| Load Voltage Range		24-280VAC
Transient Overvoltage		600Vpk
Load Current Range	1A	0.1-1A
	2A	0.1-2A
Maximum Surge Current [@10ms]	1A	25A
	2A	35A
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	10ms
Maximum Turn-off Time		10ms
Maximum Off-state Leakage Current [@Rated Voltage]		1.5mA
Maximum On-state Voltage Drop [@Rated Voltage]		1.5Vrms
Minimum Off-state dv/dt [@Maximum Rated Voltage]		200V/μs

3) General Information

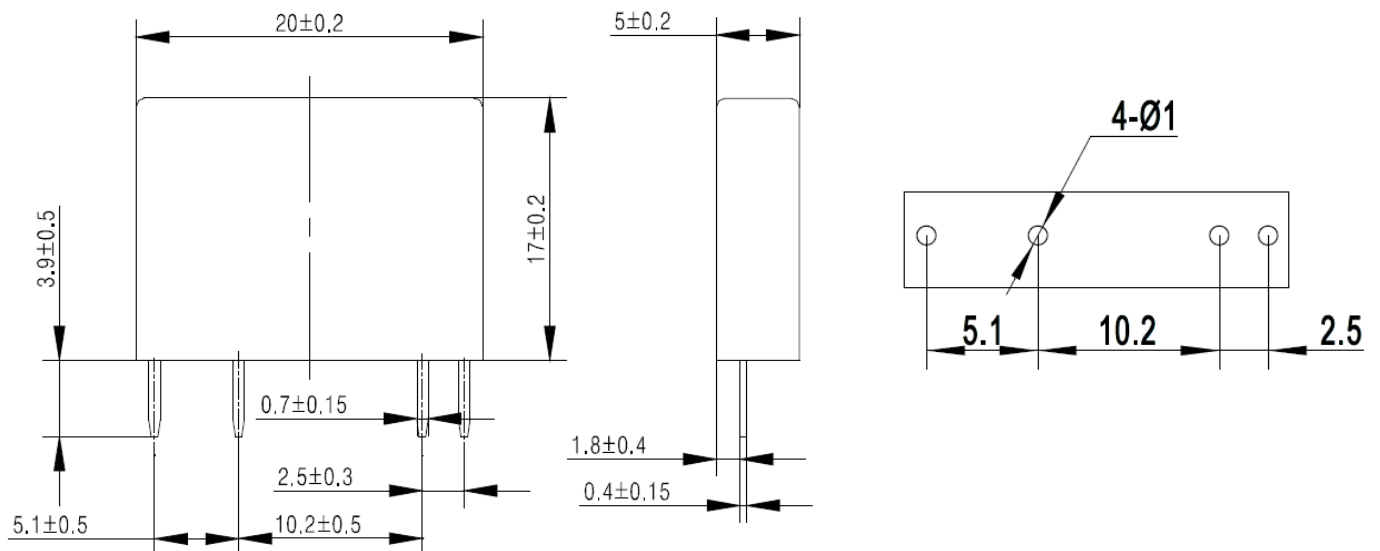| Dielectric Strength, Input/Output [50/60Hz]	≥2500VACrms
Insulation Resistance	1000MΩ [@500VDC]
Ambient Operating Temperature Range	-30℃ ~ +80℃
Ambient Storage Temperature Range	-30℃ ~ +100℃
Weight [Typical]	3g

5. ORDERING INFORMATION

KSC	240	D	2	R	-24	T
①	②	③	④	⑤	⑥	⑦

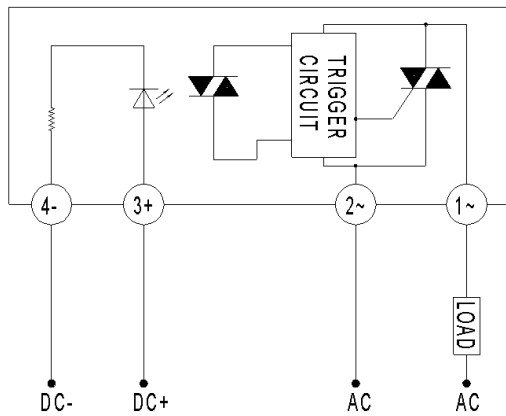| ① Relay Model	KSC
② Load Voltage	240: 240VAC
③ Control	D: DC control
④ Load Current	1: 1Amp 2: 2Amp
⑤ Switching Mode	None: Zero crossing R: Random-on
⑥ Control Current/Voltage	I: 10mA 5: 5VDC 12: 12VDC 24: 24VDC
⑦ Footprint	None: Standard footprint T: T type footprint

6. INSTALLATION

a) Standard Footprint

b) T type Footprint

7. WIRING DIAGRAM

8. THERMAL CURVE