

Solid State Relay (Single Phase AC Output)

KSD(037)

Features

- Zero crossing or random-on switching
- Rating from: 3A, 5A@24-530VAC
- Control voltage: 4-15VDC, 15-32VDC, 4-32VDC
- Opto-isolation: $\geq 4000\text{VACrms}$
- RoHS compliant



1. DESCRIPTION

KSD(037) series is PCB mounted solid state relay. Load current is 3A and 5A including zero cross and random-on switching control. Control voltage is 4-15VDC, 15-32VDC, and 4-32VDC. Opto-isolation is 4000VACrms. High inrush current capability.

2. APPLICATION

Suitable for important industrial applications such as lighting control, motor control, medical device and elevator.

3. IMPORTANT NOTICE

- 1) Soldering must be finished within 10 seconds at 250°C, and finished within 5 seconds at 350°C.
- 2) To ensure proper control on the terminal polarity, else it may damage the product.

4. TECHNICAL SPECIFICATION

1) Input Circuit

Control Voltage Range	L	4-15VDC
	H	15-32VDC
	W	4-32VDC
Minimum Turn-on Voltage	L	4VDC
	H	15VDC
	W	4VDC
Minimum Turn-off Voltage	L	1VDC
	H	5VDC
	W	1VDC
Maximum Input Current		25mA

2) Output Circuit

Load Voltage Range	240VAC	24-280VAC
	380VAC	24-440VAC
	480VAC	24-530VAC
Transient Overvoltage	240VAC	600Vpk
	380VAC	800Vpk
	480VAC	1200Vpk
Load Current Range	3A	0.1-3A
	5A	0.1-5A
Maximum Surge Current [@10ms]	3A	160A
	5A	250A
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 Current]		1.5Vrms
Minimum Off-state dv/dt [@Maximum Rated Voltage]	3A	200V/μs
	5A	500V/μs

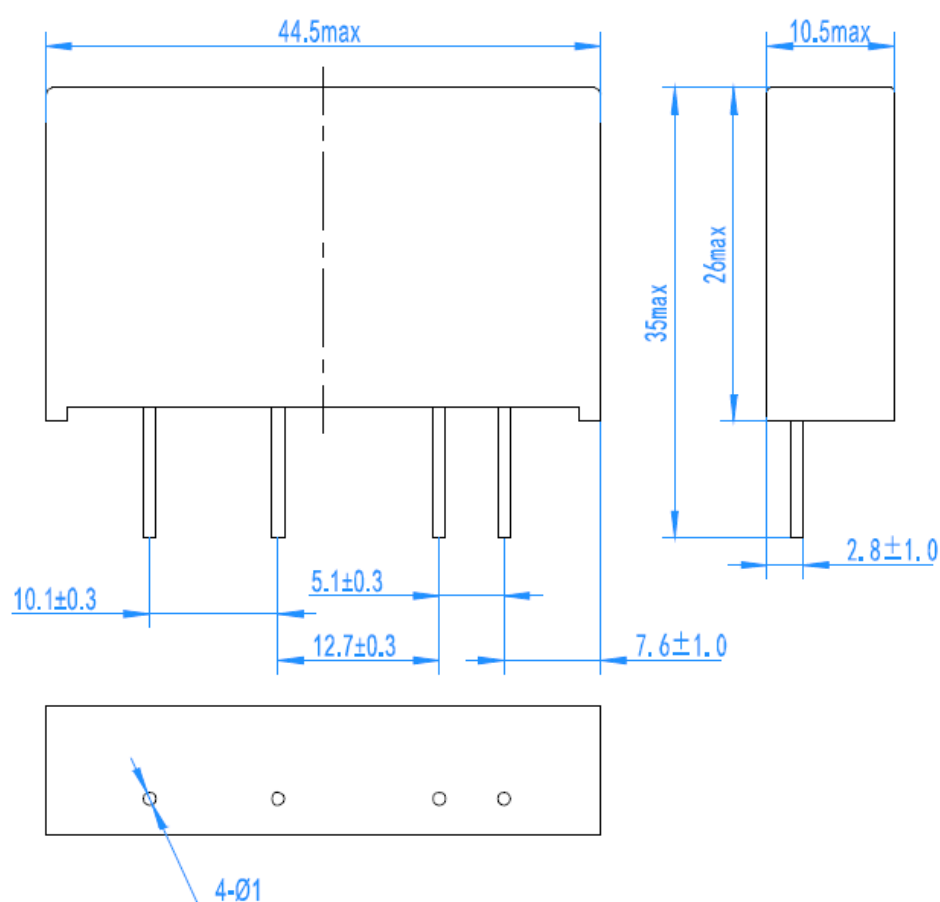
3) General Information

Dielectric Strength, Input/Output [50/60Hz]	≥4000VACrms
Ambient Operating Temperature Range	-30 °C ~ +80 °C
Ambient Storage Temperature Range	-30 °C ~ +100 °C
Weight [Typical]	20g

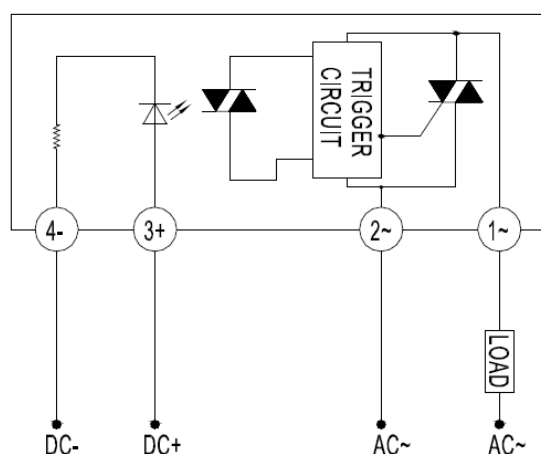
5. ORDERING INFORMATION

<u>KSD</u> ①	<u>380</u> ②	<u>D</u> ③	<u>5</u> ④	<u>R</u> ⑤	<u>-L</u> ⑥	<u>(037)</u> ⑦
① Relay Model	KSD					
② Load Voltage	240: 240VAC 380: 380VAC 480: 480VAC					
③ Control	D: DC control					
④ Load Current	3: 3Amp 5: 5Amp					
⑤ Switching Mode	None: Zero crossing R: Random-on					
⑥ Control Voltage	L: 4-15VDC H: 15-32VDC W: 4-32VDC					
⑦ Customization	(037): Plastic case Other: Customer code					

6. INSTALLATION



7. WIRING DIAGRAM



8. THERMAL CURVE

