

Solid State Relay (Single Phase AC Output)

KSG3R

Features

- TRIAC output
- Load current: 0.1A-3A
- PCB mounted
- Control voltage: 5VDC, 12VDC, 24VDC
- Dielectric strength: $\geq 4000\text{VACrms}$
- Opto-isolation
- LED indication
- RoHS compliant



1. DESCRIPTION

KSG3R series is printed board mounted solid state relay. The control voltage is 5VDC, 12VDC and 24VDC. Load current is 2A and 3A. Load voltage is 240VAC and 380VAC. Dielectric strength is 4000VACrms between input and output.

2. APPLICATION

Suitable for all kinds of electromagnetic device and intelligent instrument.

3. IMPORTANT NOTICE

- 1) Soldering must be finished within 10 seconds at 250℃, and finished within 5 seconds at 350℃.
- 2) Consideration of heating dissipation, load current will be decreased if without enough ventilation.

4. TECHNICAL SPECIFICATION

1) Input Circuit

Control Voltage Range	5VDC	4-6VDC
	12VDC	9.6-14.4VDC
	24VDC	19.2-28.8VDC
Minimum Turn-on Voltage	5VDC	4VDC
	12VDC	9.6VDC
	24VDC	19.2VDC
Minimum Turn-off Voltage		1.0VDC
Maximum Input Current		20mA

2) Output Circuit

Load Voltage Range	240VAC	24-280VAC
	380VAC	24-440VAC
Transient Overvoltage	240VAC	600Vpk
	380VAC	800Vpk
Load Current Range	2A	0.1-2A
	3A	0.1-3A
Maximum Surge Current [@10ms]	2A	30A
	3A	120A
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	10ms
Maximum Turn-off Time		10ms
Maximum Off-state Leakage Current [@Rated Voltage]		3mA
Maximum On-state Voltage Drop [@Rated Current]		1.3Vrms
Minimum Off-state dv/dt [@Maximum Rated Voltage]		200V/ μ s

3) General Information

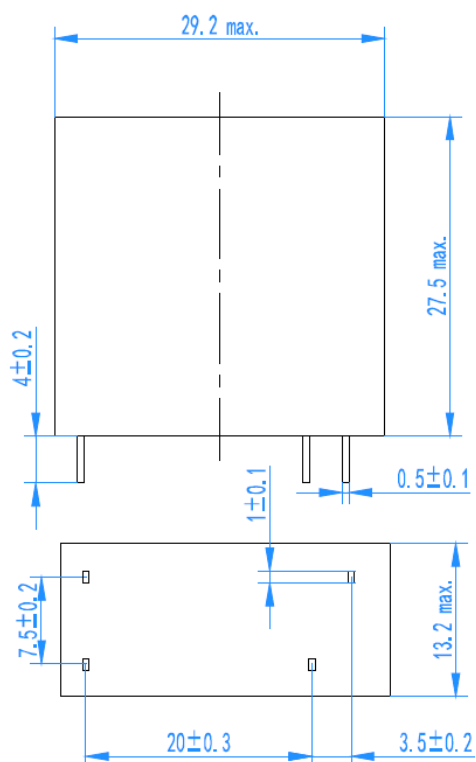
Dielectric Strength, Input/Output [50/60Hz]	≥ 4000 VACrms
Insulation Resistance	1000M Ω [@500VDC]
Ambient Operating Temperature Range	-30 $^{\circ}$ C ~ +80 $^{\circ}$ C
Ambient Storage Temperature Range	-30 $^{\circ}$ C ~ +100 $^{\circ}$ C
Weight [Typical]	18g

5. ORDERING INFORMATION

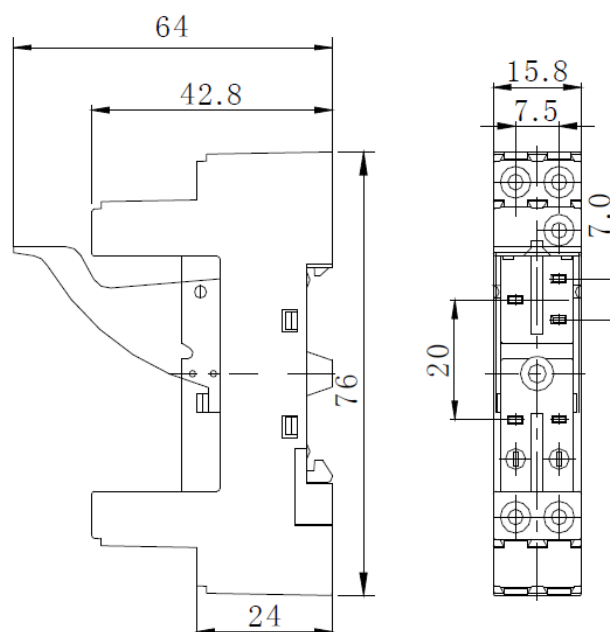
<u>KSG3R</u> <u>380</u> <u>D</u> <u>3</u> <u>R</u> <u>-5</u> <u>D</u> ① ② ③ ④ ⑤ ⑥ ⑦	
① Relay Model	KSG3R
② Load Voltage	240: 240VAC 380: 380VAC
③ Control	D: DC control
④ Load Current	2: 2Amp 3: 3Amp
⑤ Switching Mode	None: Zero crossing R: Random-on
⑥ Control Voltage	5: 5VDC 12: 12VDC 24: 24VDC
⑦ Socket	None: Without Socket D: With Socket

6. INSTALLATION

Relay



Socket



7. THERMAL CURVE

