

## Solid State Relay (Single Phase DC Output)

KG3RD

### Features

- Bipolar transistor output
- Load current: 0.1A-2A
- PCB mounted
- Control voltage: 5VDC, 12VDC, 24VDC
- Dielectric strength:  $\geq 4000\text{VACrms}$
- Opto-isolation
- LED indication
- RoHS compliant



## 1. DESCRIPTION

KG3RD series is printed board mounted solid state relay. Control voltage is 5VDC, 12VDC and 24VDC. Load current is 2A. Load voltage is 50VDC and 100VDC. Dielectric strength is 4000VACrms between input and output.

## 2. APPLICATION

Suitable for all kinds of DC motor, DC power supply, 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	50VDC	3-50VDC
	100VDC	3-100VDC
Transient Overvoltage	50VDC	50Vpk
	100VDC	100Vpk
Load Current Range	2A	0.1-2A
Maximum Surge Current [@10ms]	2A	8A
Maximum Turn-on Time		0.5ms
Maximum Turn-off Time		0.5ms
Maximum Off-state Leakage Current [@Rated Voltage]		0.1mA
Maximum On-state Voltage Drop [@Rated Current]		1.5VDC

## 3) General Information

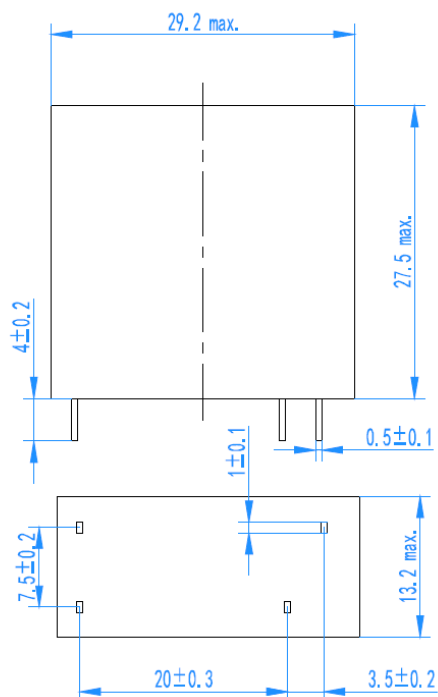
Dielectric Strength, Input/Output [50/60Hz]	≥4000VACrms
Ambient Operating Temperature Range	-30℃ ~ +80℃
Ambient Storage Temperature Range	-30℃ ~ +100℃
Weight [Typical]	18g

## 5. ORDERING INFORMATION

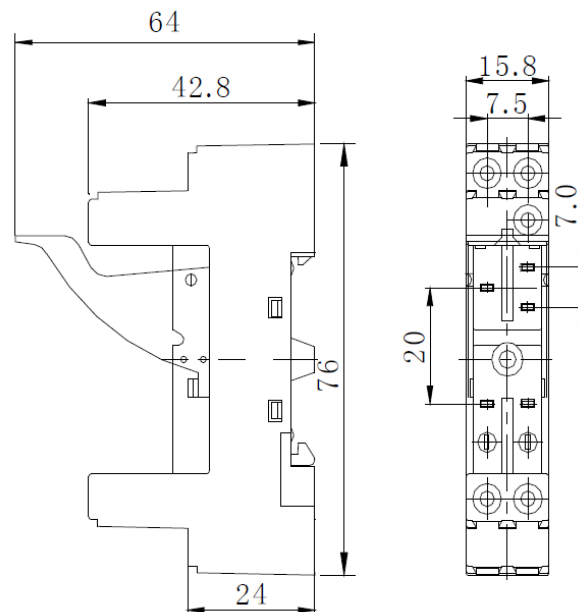
<u>KG3RD</u> <u>50</u> <u>D</u> <u>2</u> <u>-5</u> <u>D</u> ①   ②   ③   ④   ⑤   ⑥	
① Relay Model	KG3RD
② Load Voltage	50: 50VDC 100: 100VDC
③ Control	D: DC control
④ Load Current	2: 2Amp
⑤ Control Voltage	5: 5VDC 12: 12VDC 24: 24VDC
⑥ Socket	None: Without socket D: With socket

## 6. INSTALLATION

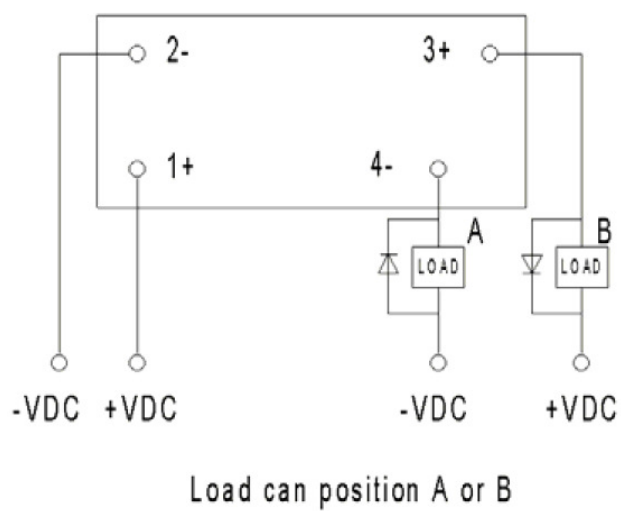
Relay



Socket



## 7. WIRING DIAGRAM



## 8. THERMAL CURVE

