

## Solid State Relay (Single Phase AC Output)

KSFA

### Features

- Load current: 3A@24-440VAC
- Control voltage: 5VDC, 12VDC, 24VDC
- High surge current ability
- Dielectric strength:  $\geq 4000\text{VACrms}$
- PCB mounted
- RoHS compliant



## 1. DESCRIPTION

KSFA series is PCB mounted AC output solid state relay. Small volume with high surge current ability, load voltage is 240VAC and 380VAC.

## 2. APPLICATION

Suitable for various occasions circuit signal lamp, mining lights, electromagnetic valve, motor, heater, vending machines, medical equipment, elevators and electric control door etc.

## 3. IMPORTANT NOTICE

- 1) Soldering must be finished within 10 seconds at  $250^{\circ}\text{C}$ , and finished within 5 seconds at  $350^{\circ}\text{C}$ .
- 2) Terminal polarity to ensure proper control, or may damage the product.

## 4. TECHNICAL SPECIFICATION

### 1) Input Circuit

Control Voltage Range	5VDC	4-6VDC
	12VDC	9-15VDC
	24VDC	19-32VDC
Minimum Turn-on Voltage	5VDC	4VDC
	12VDC	9VDC
	24VDC	19VDC
Minimum Turn-off Voltage		1.0VDC
Maximum Input Current		15mA

## 2) Output Circuit

Load Voltage Range	240VAC	24-280VAC
	380VAC	24-440VAC
Transient Overvoltage		800Vpk
Load Current Range		0.1-3A
Maximum Surge Current [@10ms]		100A
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	10ms
Maximum Turn-off Time		10ms
Maximum Off-state Leakage Current [@Rated Voltage]	Without RC	1mA
	With RC	3mA
Maximum On-state Voltage Drop [@Rated Current]		1.5Vrms
Minimum Off-state dv/dt [@Maximum Rated Voltage]		200V/μs

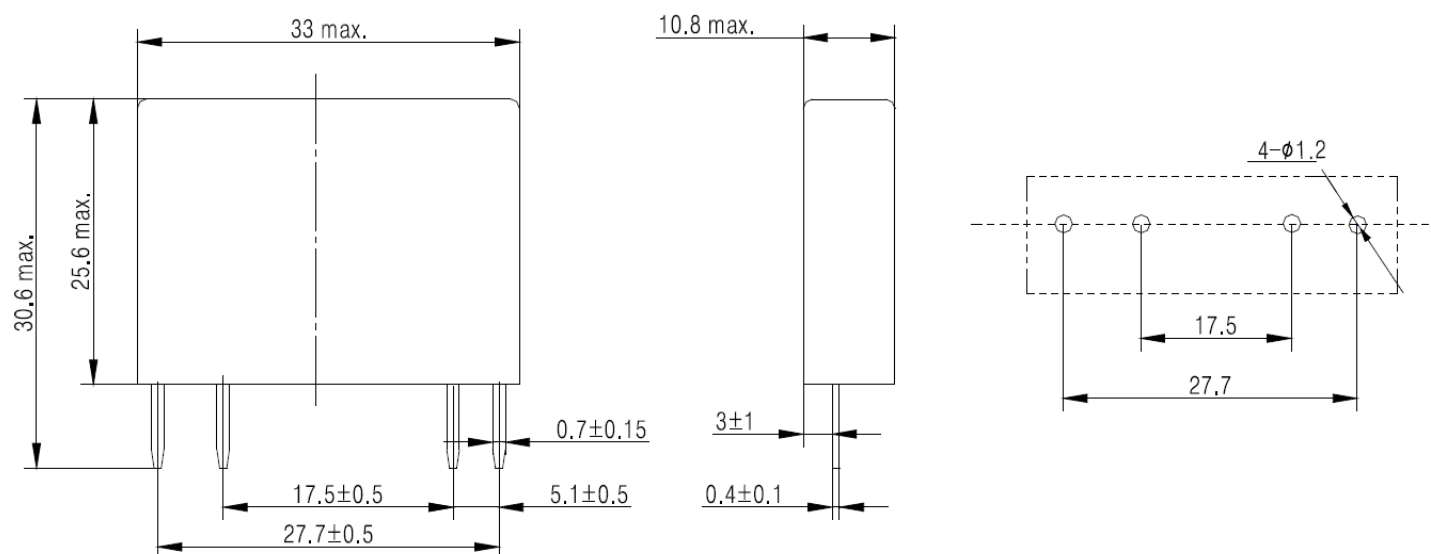
## 3) General Information

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

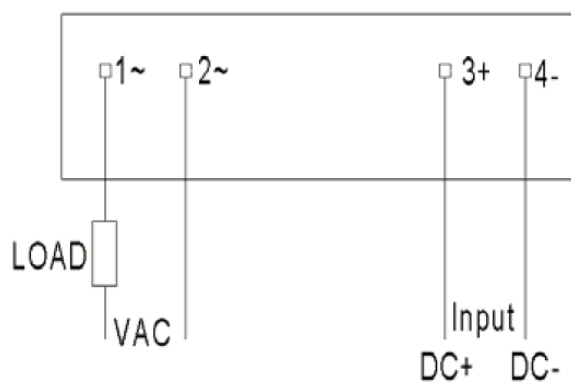
## 5. ORDERING INFORMATION

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

## 6. INSTALLATION



## 7. WIRING DIAGRAM



## 8. THERMAL CURVE

