

## Solid State Relay

### KSA Series Single Phase AC Output

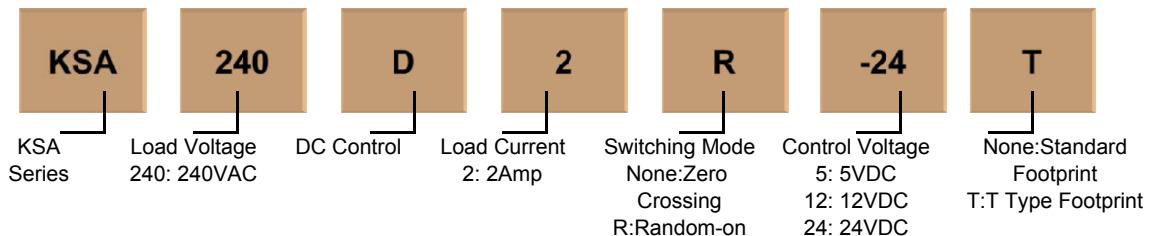


- TTL Compatible Drive
- Load Durrent:0.1A-2A @ 24-280VAC
- Control Voltage:5VDC, 12VDC, 24VDC
- Dielectric Strength:2500VACrms
- PCB Mounted
- RoHS Compliant

#### Product Description

The KSA series is printed board mounted AC output solid state relay. Small volume with high surge current ability. Suitable for control electromagnetic valve, electric machine, filament lamp etc. The control input voltage is 5VDC, 12VDC and 24VDC. Opto-isolation between input and output, output is AC output random-on and AC output zero crossing.

#### Product Selection



| Description | 2A           |               |
|-------------|--------------|---------------|
| 5VDC        | KSA240D2-5   | KSA240D2-5T   |
|             | KSA240D2R-5  | KSA240D2R-5T  |
| 12VDC       | KSA240D2-12  | KSA240D2-12T  |
|             | KSA240D2R-12 | KSA240D2R-12T |
| 24VDC       | KSA240D2-24  | KSA240D2-24T  |
|             | KSA240D2R-24 | KSA240D2R-24T |

#### Technical Specification

##### Input Circuit

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

##### Output Circuit

|                       |           |
|-----------------------|-----------|
| Load Voltage Range    | 24-280VAC |
| Transient Overvoltage | 600Vpk    |

**Maximum Surge Current  
[@10ms]**

25A

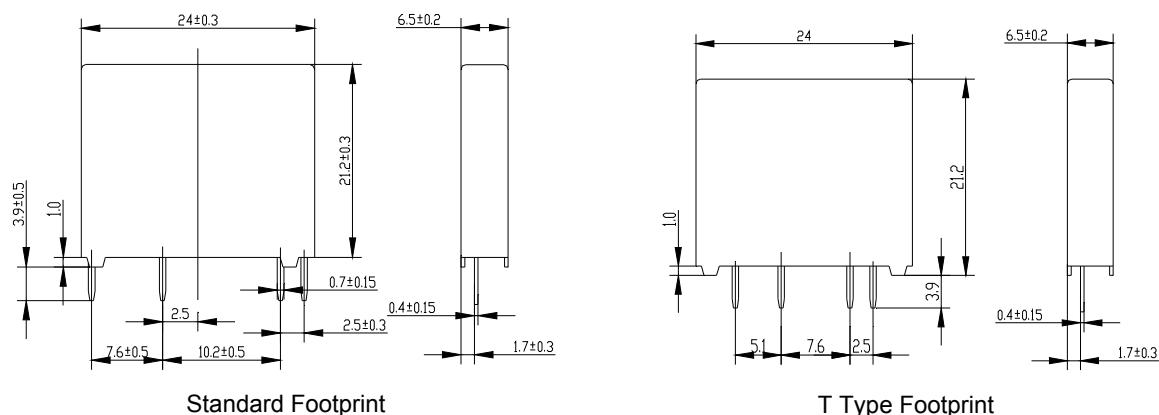
|   |               |         |
|---|---------------|---------|
| Maximum Turn-on Time                                | Random-on     | 1ms     |
|   | Zero Crossing | 10ms    |
| Maximum Turn-off Time                               |               | 10ms    |
| Load Current Range                                  |               | 0.1-2A  |
| 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]   |               | 200V/μs |

**General Information**

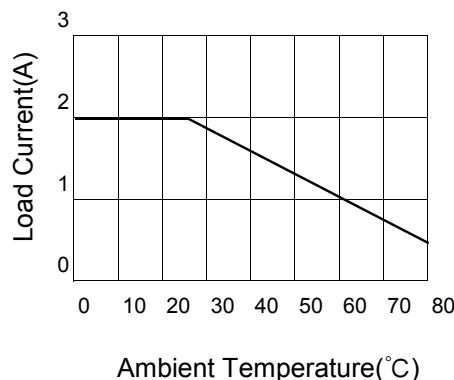
|   |                  |
|---|------------------|
| Dielectric Strength, Input/Output [50/60Hz] | $\geq 2500$ Vrms |
| Insulation Resistance                       | 1000MΩ(@500VDC)  |
| Ambient Operating Temperature Range         | -30°C ~ +80 °C   |
| Ambient Storage Temperature Range           | -30°C ~ +100 °C  |
| Weight [Typical]                            | 6 g              |

**Application**

Suitable for control electromagnetic valve, electric machine, filament lamp etc.

**Installation**


## Thermal Curve



## Important Notice

1. Soldering must be finished within 10 seconds at 250°C, and finished within 5 seconds at 350°C.
2. Terminal polarity to ensure proper control, or may damage the product.
3. When the ambient temperature is over 25°C, load current performance will decline.

## Product Certification

