



DESCRIPTION

KS32 is a set of SPST-NO DC output PCB or Socket mount Mini type SSR. The SSR has five DC input options 5VDC, 12VDC, 24VDC, 48VDC and 60VDC for selection and provides 2500Vrms photoelectric isolation between input and output. Pins of the SSR are fully compatible with standard packaged electromechanical relays, thus it will be very convenient for users to install and use.

FEATURES

- ◆ Mini type SSR, PCB or socket mount
- ◆ Photoelectric isolation, dielectric strength 2500VAC
- ◆ Pin-compatible with standard package EMR
- ◆ TTL and CMOS compatible
- ◆ I/O modules for interface between PLC and input devices or loads

PRECAUTIONS

1. Soldering must be completed within 10s at 260°C or 5s at 350°C.
2. The SSR's case serves to dissipate the heat generated by the SSR itself. If poor ventilation is unavoidable, the load current must be derated. Please refer to the curve of Max. Load Current vs. Ambient Temperature for derating.
3. Please do not use the SSR exceeding the limitation which is specified on this datasheet.

SELECTION GUIDE

| KS32 / | 24- | 24D | 3 | N | -H | (XXX) |
|--------|---|--------------------------|--|-----------------|--------------------------------|-----------------------|
| Type | Control voltage | Load voltage | Load current | RC snubber | Mount mode | Customer special code |
| | 5: 5VDC 12: 12VDC 24: 24VDC 48: 48VDC 60: 60VDC | 24D: 24VDC 48D: 48VDC | 3: 3A (Vertical) 4: 4A (Vertical) 5: 5A (Horizontal) | N: Not included | H: Horizontal Nil: Vertical | |

Note: Only below specifications are available: KS32/□□-24D3N, KS32/□□-24D4N, KS32/□□-48D3N, KS32/□□-24D5N-H.

INPUT SPECIFICATIONS (Ta = 25°C)

| | | |
|---------------------------------|----|----------------|
| Control voltage range | 5 | 4 ~ 6VDC |
| | 12 | 9.6 ~ 14.4VDC |
| | 24 | 19.2 ~ 28.8VDC |
| | 48 | 38.4 ~ 57.6VDC |
| | 60 | 48 ~ 72VDC |
| Must turn-on voltage | 5 | 4VDC |
| | 12 | 9.6VDC |
| | 24 | 19.2VDC |
| | 48 | 38.4VDC |
| | 60 | 48VDC |
| Must turn-off voltage | 5 | 1VDC |
| | 12 | 3VDC |
| | 24 | 9VDC |
| | 48 | 10VDC |
| | 60 | 20VDC |
| Max. input current | | 25mA |
| Max. reverse protection voltage | 5 | -6VDC |
| | 12 | -14.4VDC |
| | 24 | -28.8VDC |
| | 48 | -57.6VDC |
| | 60 | -72VDC |

OUTPUT SPECIFICATIONS (TA = 25°C)

| | | |
|--------------------------------|------|-------------|
| Load voltage range | 24D□ | 3 ~ 28.8VDC |
| | 48D□ | 3 ~ 57.6VDC |
| Max. transient voltage | 24D□ | 33VDC |
| | 48D□ | 58VDC |
| Load current range | 24D3 | 0.02 ~ 3A |
| | 24D4 | 0.02 ~ 4A |
| | 24D5 | 0.02 ~ 5A |
| | 48D3 | 0.02 ~ 3A |
| Max. surge current (10ms) | 24D3 | 48Apk |
| | 24D4 | 48Apk |
| | 24D5 | 60Apk |
| | 48D3 | 30Apk |
| Max. off-state leakage current | | 100μA |

OUTPUT SPECIFICATIONS (Ta = 25°C)

| | | |
|----------------------------|------|---------|
| Max. on-state voltage drop | 24D3 | 0.2VDC |
| | 24D4 | 0.35VDC |
| | 24D5 | 0.2VDC |
| | 48D3 | 0.35VDC |
| Max. turn-on time | | 50μs |
| Max. turn-off time | | 300μs |

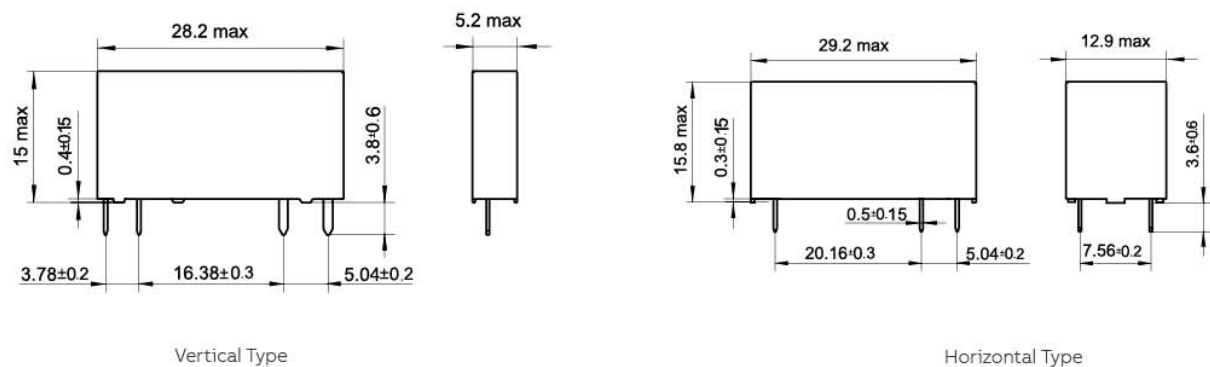
GENERAL SPECIFICATIONS (Ta = 25°C)

| | | |
|------------------------------------|---|-------------|
| Dielectric strength (input/output) | 2500VAC, 1min | |
| Insulation resistance | 1000MΩ (500VDC) | |
| Max. capacitance (input/output) | 5pF | |
| Vibration resistance | 10~55Hz, 1.5mm, DA | |
| Ambient temperature | Operating temperature | -30 ~ 80°C |
| | Storage temperature | -30 ~ 100°C |
| Ambient humidity | 45% ~ 85% RH | |
| Unit weight | Horizontal type approx. 11g, vertical type approx. 4g | |
| Shock resistance | Acceleration 980m/s ² , continuous surge 6ms | |

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT

Unit: mm

Outline Dimensions

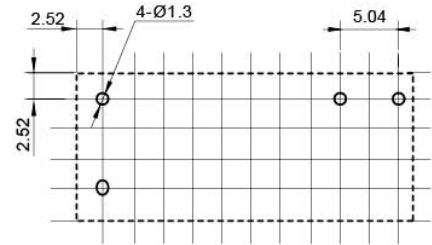
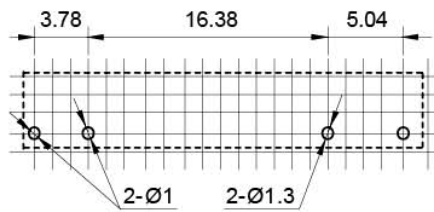


OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT

Unit: mm

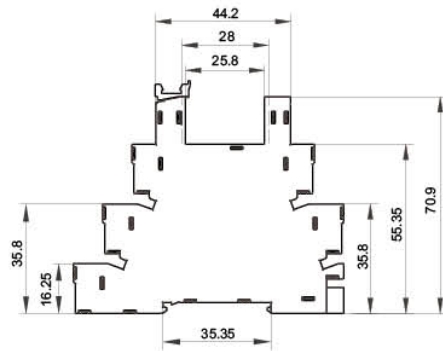
PCB and Socket Layout

PCB Layout
(Bottom view)



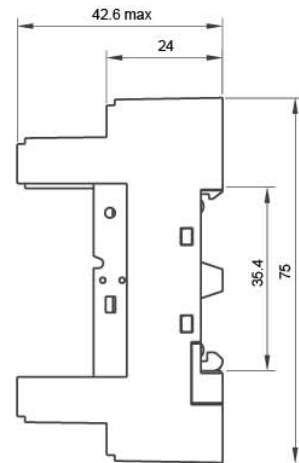
Socket Layout

Vertical Type



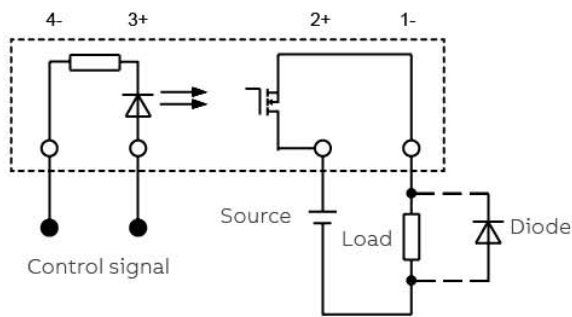
Socket Model: KRS32/V-SC-1 (Input 5/12/24V)
KRS32/V-SC-2 (Input 60V)

Horizontal Type

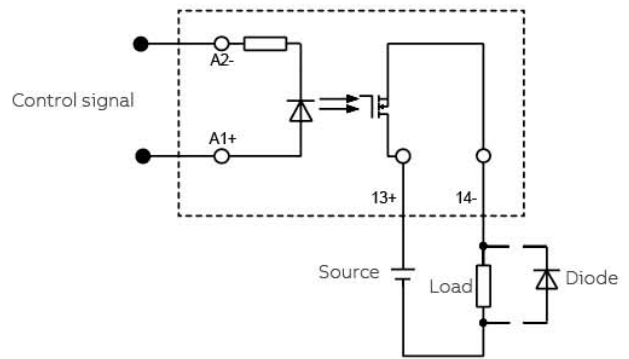


Socket Model: KRS32/H-SC

Wiring Diagram



Vertical Type



Horizontal Type

CHARACTERISTIC CURVES

