



S Series

High Voltage relays

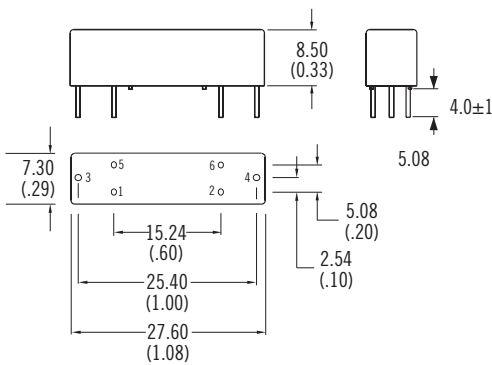


The S series relay was developed for the high voltage ATE market, where printed circuit board space is at a premium. The S series high voltage relay offers a 3kV or 5*kV isolation performance in a 30mm package.

Low contact resistance, through the use of Rhodium contact reed switches, makes the S series suitable for many high voltage applications at DC and low frequency, where performance and reliability are paramount.

Mechanical Dimensions

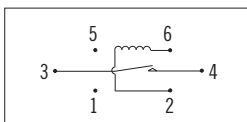
All dimensions are in Millimetres (inches)



PIN SIZE

PINS 1, 2, 5 & 6 0.7 Square (0.025")
PINS 3 & 4 0.8 (0.031") dia.

Relay Circuit Diagram



(Viewed from Underside)

Pin 1 is top left, when viewed from above, with respect to part marking

Cynergy3 Components Ltd.
7 Cobham Road
Ferndown Industrial Estate
Wimborne, Dorset BH21 7PE
Telephone +44 (0) 1202 897969

Email:sales@cynergy3.com

- Compact footprint
- Designed specifically for High Voltage ATE
- Rhodium contacts for Low Contact Resistance
- 3kV or 5kV* Isolation between contacts and 5kV isolation between contacts and coil
- Excellent lifetime characteristics

| Contact Specification | Unit | Condition | 3kV SPNO | | | 5kV SPNO | | |
|-----------------------------|------|-------------------------|--------------------------------------|------|------|--------------------------------------|------|------|
| Contact Material | | | Rhodium | | | Rhodium | | |
| Isolation across contacts | kV | DC or AC peak | 3 | | | 5 | | |
| Switching Power Max. | W | | 10 | | | 10 | | |
| Switching Voltage Max. | V | DC or AC peak | 20 | | | 20 | | |
| Switching Current Max. | A | DC or AC peak | 0.5 | | | 0.5 | | |
| Carry Current Max | A | DC or AC peak | 1.5 | | | 1.5 | | |
| Capacitance across contacts | pF | coil to screen grounded | <0.1 | | | <0.1 | | |
| Lifetime operations | | dry switching | 10 ⁹ | | | 10 ⁸ | | |
| | | 10W switching | 10 ⁶ | | | 10 ⁶ | | |
| Contact Resistance | m | max (typical) | 80 (30) | | | 80 (30) | | |
| Insulation Resistance | | min (typical) | 10 ¹⁰ (10 ¹³) | | | 10 ¹⁰ (10 ¹³) | | |
| Coil Specification at 20°C | | | 5V | 12V | 24V | 5V | 12V | 24V |
| Must Operate Voltage | V | DC | 3.7 | 9 | 20 | 3.7 | 9 | 20 |
| Must Release Voltage | V | DC | 0.5 | 1.25 | 4 | 0.5 | 1.25 | 4 |
| Operate Time | ms | diode fitted | 1.0 | 1.0 | 1.0 | 1.0 | 1. | 10 |
| Release Time | ms | diode fitted | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Resistance | | | 140 | 600 | 1000 | 140 | 600 | 1000 |

Relay Specification

| | | | |
|------------------------------------------------|---------------|--------------------------------------|--------------------------------------|
| Isolation contact/coil | kV | 5 | 5 |
| Insulation resistance contact to all terminals | min (typical) | 10 ¹⁰ (10 ¹³) | 10 ¹⁰ (10 ¹³) |
| Environmental | | | |
| Operating Temp range | °C | -20 to +70 | -20 to +70 |
| Weight | gm | 3.1 | 3.1 |

Part Numbering System

