



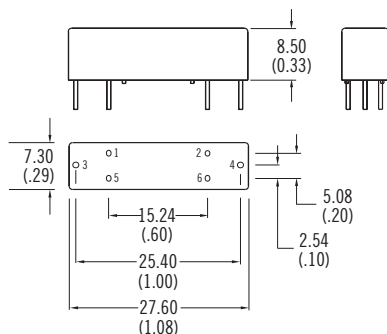
The S series was developed for the high voltage ATE market, where printed circuit board (PCB) space is at a premium, the S series high voltage reed relay offers a 3 or 5\* kV isolation performance in a 30mm size package. With low contact resistance, the S series is suitable for many high voltage applications at DC and low frequency, where performance and reliability are paramount.



- **Compact Footprint**
- **Designed Specifically for High Voltage**
- **Rhodium Contacts for Low Resistance**
- **3 or 5kV \* Isolation Between Contacts**
- **Excellent Lifetime Characteristics**

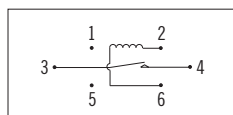
**Mechanical Dimensions**

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.

**CIRCUIT DIAGRAM**



(Viewed from Underside)

**USA**

Cynergy3 Components  
 2320 Paseo de las Americas, Suite 104  
 San Diego, CA 92154  
 Sales & Tech Support (866) 258-5057  
 Email: sales@cynergy3.com

**EUROPE - UK**

Cynergy3 Components Ltd. +44 (0) 1202 897969  
 7 Cobham Road Fax +44 (0) 1202 891918  
 Ferndown Industrial Estate Email: sales@cynergy3.com  
 Wimborne, Dorset BH21 7PE

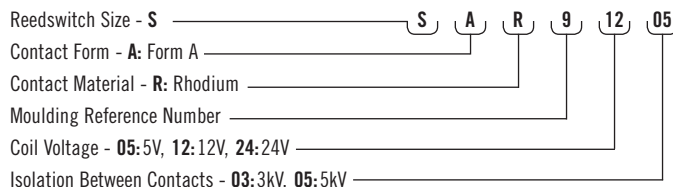
| Contact  | Units      | Conditions           | 3kV Form A                           | 5kV Form A                           |
|--|------------|----------------------|--------------------------------------|--------------------------------------|
| Contact Materials                                    |            |                      | <b>Rhodium</b>                       | <b>Rhodium</b>                       |
| Isolation Across Contacts                            | kV         | DC or AC peak        | 3                                    | 5*                                   |
| Max. Switching Power                                 | W          |                      | 10                                   | 10                                   |
| Max. Switching Voltage                               | V          | DC or AC peak        | 20                                   | 20                                   |
| Max. Switching Current                               | A          | DC or AC peak        | 0.5                                  | 0.5                                  |
| Max. Carry Current                                   | A          | DC or AC rms (60Hz)  | 1.5                                  | 1.5                                  |
| Capacitance Across Contacts                          | pF         | Coil/Screen Grounded | <0.1                                 | <0.1                                 |
| Lifetime   | Operations | Dry Switching        | 10 <sup>9</sup>                      | 10 <sup>9</sup>                      |
| Lifetime   | Operations | 10W Switching        | 10 <sup>8</sup>                      | 10 <sup>8</sup>                      |
| Contact Resistance                                   | mOhms      | Maximum (Typical)    | 80 (30)                              | 80 (30)                              |
| Insulation Resistance Contact to All Other Terminals | Ohms       | Minimum (Typical)    | 10 <sup>10</sup> (10 <sup>13</sup> ) | 10 <sup>10</sup> (10 <sup>13</sup> ) |

| Coil at 20°C |      |              | 5V  | 12V  | 24V  | 5V  | 12V  | 24V  |
|--------------|------|--------------|-----|------|------|-----|------|------|
| Must Operate | V    | DC           | 3.7 | 9    | 20   | 3.7 | 9    | 20   |
| Must Release | V    | DC           | 0.5 | 1.25 | 3    | 0.5 | 1.25 | 3    |
| Operate Time | ms   | Diode Fitted | 1.0 | 1.0  | 1.0  | 1.0 | 1.0  | 1.0  |
| Release Time | ms   | Diode Fitted | 0.5 | 0.5  | 0.5  | 0.5 | 0.5  | 0.5  |
| Resistance   | Ohms |              | 140 | 600  | 1000 | 140 | 600  | 1000 |

| Construction                                     |    |                                 | 5V | 12V | 24V |
|--|----|---------------------------------|----|-----|-----|
| Isolation Contact to Coil to All Other Terminals | kV | DC or AC peak Minimum (Typical) | 5  |     | 5   |

| Environmental               |    |  | 5V         | 12V | 24V        |
|-----------------------------|----|--|------------|-----|------------|
| Operating Temperature Range | °C |  | -20 to +70 |     | -20 to +70 |

**Part Numbering System**



\* DC only, Pin 3 +HV