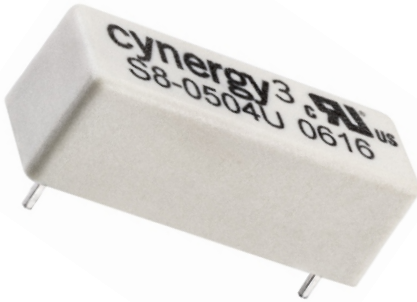


## S8(UL) Series

### UL Approved\* Miniature High Voltage Relay



The S8(UL) series is a miniature high voltage reed relay for applications where space saving is a prime consideration.

The coil pins are positioned near the centre of the relay while the contact pins are near the ends to give improved isolation between the High Voltage contacts and the low voltage coil.

#### \*Consult factory for UL ratings

These products have been UL approved for use as per pollution degree 2 classification.  
If you require further information as to how this may affect product usage, please contact sales@cynergy3.com.

- Space saving package
- Up to 1000V switching voltage
- Isolation Voltage 7kV contact to coil
- 2.5A carry current
- Isolation Voltage across contacts 4kV or 5kV (dependant on coil voltage)



| Contact Specification       | Conditions                 | 5V coil     | 12V coil                             | 24V coil |
|-----------------------------|----------------------------|-------------|--------------------------------------|----------|
| Switch action               |                            |             | SPST (Form A)                        |          |
| Material                    |                            |             | Rhodium                              |          |
| Isolation across contacts   | kV DC or AC peak           | 4           | 4                                    | 5        |
| Switching Power Max.        | VA (W for -V variants)     |             | 100                                  |          |
| Switching Voltage Max.      | V                          | 350dc/300ac | 1000Vdc & ac peak for -V variants)   |          |
| Switching Current Max.      | A DC or AC peak            |             | 1.0                                  |          |
| Carry Current Max           | A DC                       |             | 2.5                                  |          |
| Capacitance across contacts | pF coil to screen grounded |             | 0.5 (typical)                        |          |
| Lifetime operations         | dry switching              |             | 10 <sup>9</sup>                      |          |
|                             | 100W switching             |             | 10 <sup>7</sup>                      |          |
| Contact Resistance          | mΩ max                     |             | 150                                  |          |
| Insulation Resistance       | Ωmin (typical)             |             | 10 <sup>10</sup> (10 <sup>13</sup> ) |          |

| Coil Specification     |              |     |     |      |
|------------------------|--------------|-----|-----|------|
| Must Operate Voltage V | DC           | 4   | 9.6 | 19   |
| Must Release Voltage V | DC           | 1   | 2   | 3    |
| Operate Time ms        | diode fitted | 1   | 1   | 1    |
| Release Time ms        | diode fitted | 0.5 | 0.5 | 0.5  |
| Resistance Ω           |              | 120 | 750 | 1550 |

Note: The operate / release voltage and coil resistance will change at a rate of 0.4% per degree C. Values are stated at room temperature (20 degrees C)

| Relay Specification                            |                |  |     |  |
|--|----------------|--|-----|--|
| Isolation contact/coil kV                      |                |  | 7   |  |
| Insulation resistance contact to all terminals | Ωmin (typical) |  | TBC |  |

| Environmental           |  |  |             |  |
|-------------------------|--|--|-------------|--|
| Operating Temp range °C |  |  | -40 to +85  |  |
| Storage Temp range °C   |  |  | -40 to +125 |  |

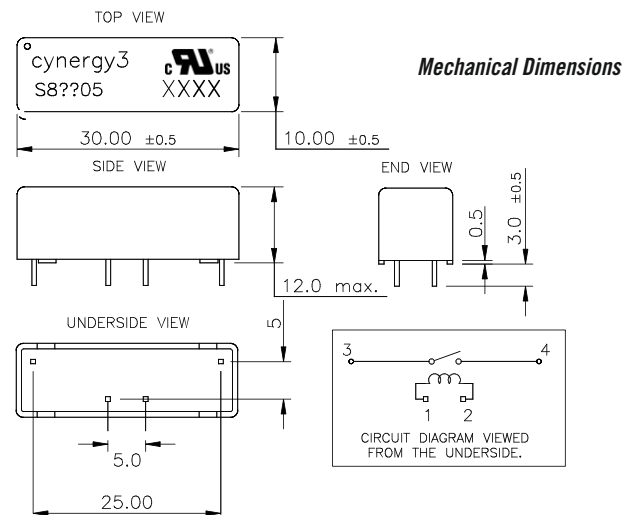
| Standard Parts | Coil Volts Vdc | Isolation across contacts kV | Max. Switching Voltage Vdc (Vac peak) |
|----------------|----------------|------------------------------|---------------------------------------|
| S8-0504U       | 5              | 4                            | 350 (300)                             |
| S8-0504VU      | 5              | 4                            | 1000 (1000)                           |
| S8-1204U       | 12             | 4                            | 350 (300)                             |
| S8-1204VU      | 12             | 4                            | 1000 (1000)                           |
| S8-2405U       | 24             | 5                            | 350 (300)                             |
| S8-2405VU      | 24             | 5                            | 1000 (1000)                           |

Custom versions can be designed for particular applications. Please contact Cynergy3 with your requirements.

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ISO9001 CERTIFIED

S8(UL) Series 2019



Pins 0.635mm Square ±0.05mm.  
Pins 1 & 2 Tin over Nickel plated, on CuSn6 Phosphor Bronze.  
Pins 3 & 4 Tin plated on NiFe Nickel Iron.  
Case Material Nylon.  
Encapsulant: Epoxy



Made in the UK  
www.cynergy3.com

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Sensata:

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