

# S8(UL) Series

## UL Approved\* Miniature High Voltage Relay

- 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)



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.

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 100W switching		10 <sup>9</sup> 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

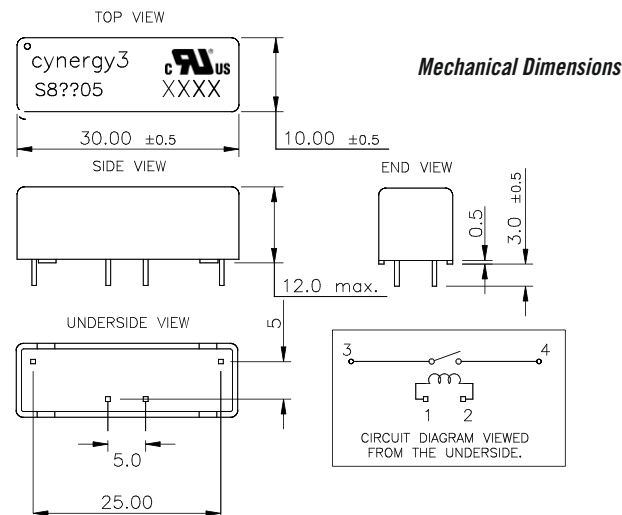
Isolation contact/coil	kV	7
Insulation resistance contact to all terminals	Ωmin (typical)	TBC

### 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.



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

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