

S8 Relay Series

Miniature high voltage relay



The S8 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.

- **Space saving package**
- **Isolation Voltage across contacts 4kV or 5kV (dependent on coil voltage)**
- **Isolation Voltage 7kV contact to coil**
- **2.5A carry current**
- **Up to 1000V switching 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 ⁹	
	100W switching		10 ⁷	
Contact Resistance	mΩ max		150	
Insulation Resistance	Ωmin (typical)		10 ¹⁰ (10 ¹³)	

Coil Specification		5V coil	12V coil	24V coil
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)
S8-0504	5	4	350 (300)
S8-0504V	5	4	1000 (1000)
S8-1204	12	4	350 (300)
S8-1204V	12	4	1000 (1000)
S8-2405	24	5	350 (300)
S8-2405V	24	5	1000 (1000)

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

Please refer to this document for circuit design notes:-
<http://www.cynergy3.com/blog/application-notes-reed-relays-0>

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

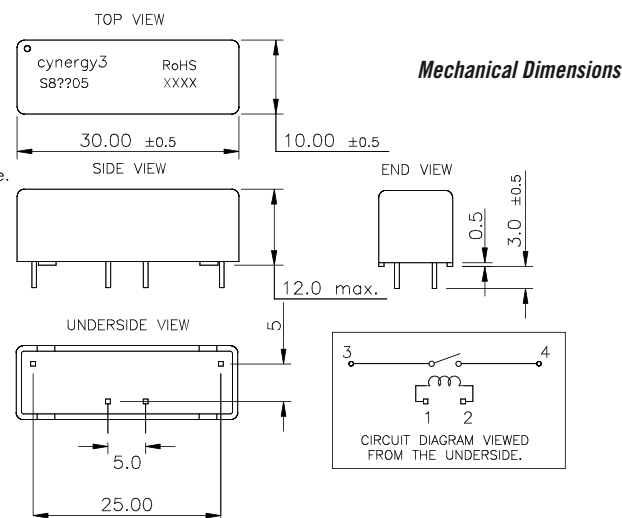
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