

## S2 RELAY SERIES

AXIAL STYLE REED RELAY





The S2 reed relay series from Cynergy3 has been developed for applications where PCB mounting is not possible.

The relay can be mounted using a variety of methods and orientations to suit particular applications. The terminal pins are flexible enough to allow bending for assembly into equipment.

Available with either a 10W or 50W contact in a pressurized reed switch or a 100VA contact in a vacuum reed switch.

#### **Features**

- Variable mounting options
- 10W, 50W and 100VA contact options
- Reliable reed switch contacts

Please refer to this document for circuit design notes: <a href="https://www.cynergy3.com/blog/reed-relay-application-notes">https://www.cynergy3.com/blog/reed-relay-application-notes</a>

Contact	Condition	Units	S2-03P	S2-XXP	S	2-XXE	
Material			Ruthenium	Rhodium	R	Rhodium	
Switch Atmosphere			Pressurized	Pressurized	١	/acuum	
<b>Isolation Across Contacts</b>		Volts DC	200	500		1000	
Switching Power Max.	Resistive load	Watts	10	50			
Switching Power Max.	Resistive load	VA		70		100	
Switching Voltage DC Max.	Resistive load	Volts DC	200	350		350	
Switching Voltage AC Max.	Resistive load	Volts AC RMS	140	300		300	
Switching Current DC Max.	Resistive load	mA DC	250	700		1000	
Switching Current AC Max	Resistive load	mA AC RMS	250	500		1000	
Carry Current Max.		Amps DC/AC RMS	1	2.5		2.5	
Contact Capacitance Max.	Open	Pico Farad (pF)	0.3	0.5		0.5	
Initial Contact Resistance Max.	Nominal coil voltage	Milliohms (mΩ)	100	100		100	
Insulation Resistance		Ohms (Ω)	10E10	10E10 10E10		10E10	
Lifetime Operations	Hot switching resistive load	Operations 50% duty cycle	10E7 (12V DC, 4mA)	10E6 (350V DC, 1m.	A) (500'	10E7 (500V DC, 1mA)	
	Dry switching	Operations 50% duty cycle	10E8	10E9			
Coil			3V	5V	12V	24V	
Must Operate Voltage	20°C	Volts DC	2.25	3.7	9	19	
Must Release Voltage	20°C	Volts DC	0.5	1	2	3	
Operate Time Inc Bounce	20°C	Milliseconds	0.1	1.0	1	11	
Release Time Inc Bounce	20°C	Milliseconds	0.07	0.5	0.5	0.5	
Resistance	20°C	Ohms	250	160	1000	1000	

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)



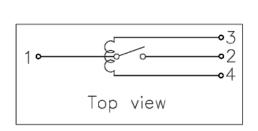
Relay	Condition	Units	S2-03P	S2-XXP	S2-XXE
Isolation Contact/Coil Min.		Volts DC	1000		
Operating Temperature Range		°C	-40 to +85		
Storage Temperature Range		°C	-40 to +125		

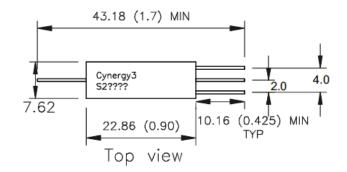
### STANDARD PARTS

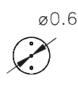
	Coil Voltage VDC	Switching Power	Isolation VDC	Switch Atmosphere
S2-03P	3	10W	200	Pressurized
S2-05P	5	70VA	500	Pressurized
S2-12P	12	70VA	500	Pressurized
S2-24P	24	70VA	500	Pressurized
S2-05E	5	100VA	1000	Vacuum
S2-12E	12	100VA	1000	Vacuum
S2-24E	24	100VA	1000	Vacuum

Custom versions can be made for particular applications. Please contact Sensata with your requirements.

# **DIMENSIONS**







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