



## | 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:

<https://www.cynergy3.com/blog/reed-relay-application-notes>

## SPECIFICATIONS

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

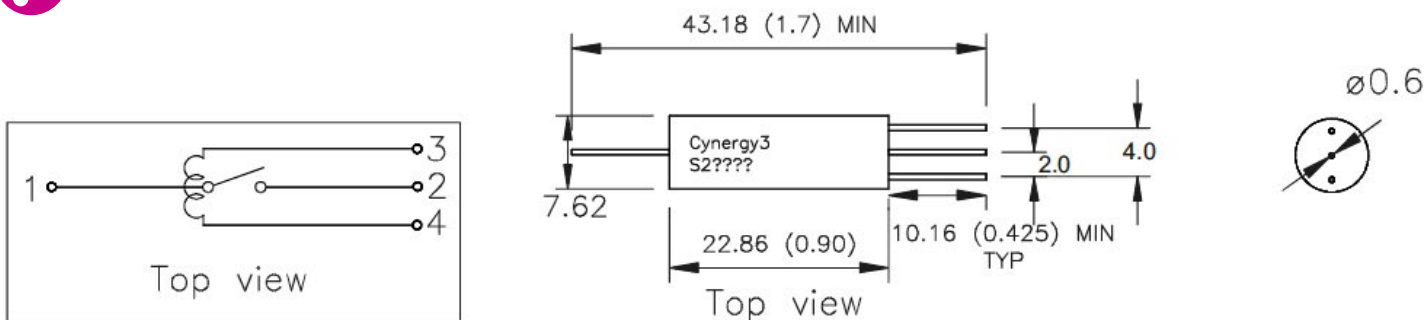
Relay	Condition	Units	S2-03P	S2-XXP	S2-XXE
Isolation Contact/Coil Min.		Volts DC		1000	
Operating Temperature Range		°C		-40 to +85	
Storage Temperature Range		°C		-40 to +125	

## STANDARD PARTS

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

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

## DIMENSIONS



Made in the UK

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