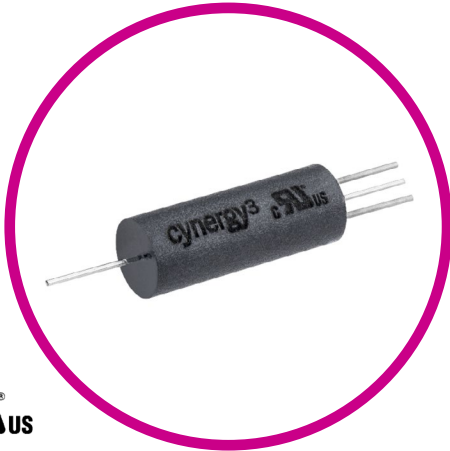




## | S2(UL) SERIES

### UL APPROVED\* AXIAL STYLE REED RELAY



The S2(UL) reed relay series from Cynergy3 has been developed and approved by UL for applications where PCB mounting is not possible.

The relay can be mounted in 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 pressurised 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>

### \*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 [c3w\\_sales@sensata.com](mailto:c3w_sales@sensata.com)



## SPECIFICATIONS

Contact	Conditions	Units	S2-03P	S2-XXP	S2-XXE
<b>Material</b>			Ruthenium	Rhodium	Rhodium
<b>Switch atmosphere</b>			Pressurised	Pressurised	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	

Contact	Conditions	Units	S2-03P	S2-XXP	S2-XXE	
Coil			3V	5V	12V	24V
<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)

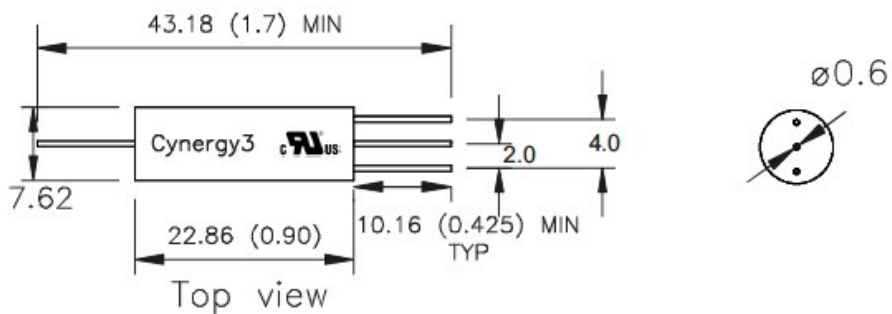
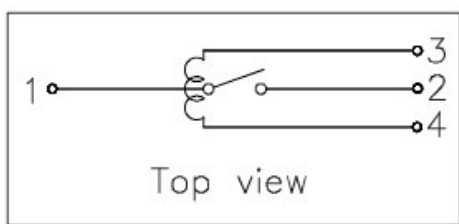
Relay	Conditions	Units	S2-03P	S2-XXP	S2-XXE	
<b>Isolation contact/coil</b>		Volts DC	1000			
<b>Operating temp range min.</b>		°C	-40 to +85			
<b>Storage temp range</b>		°C	-40 to +125			

Standard Parts	Coil Volts VDC	Switching Power	Isolation VDC	Switch Atmosphere
<b>S2-03PU</b>	3	10W	200	Pressurized
<b>S2-05PU</b>	5	70VA	500	Pressurized
<b>S2-12PU</b>	12	70VA	500	Pressurized
<b>S2-24PU</b>	24	70VA	500	Pressurized
<b>S2-05EU</b>	5	100VA	1000	Vacuum
<b>S2-12EU</b>	12	100VA	1000	Vacuum
<b>S2-24EU</b>	24	100VA	1000	Vacuum

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



## DIMENSIONS



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