S2(UL) Series

UL Approved Axial Style Reed Relay*



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

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 leadout wires 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 an evacuated reed switch.

[Please refer to this document for circuit design notes:- http://www.cynergy3.com/blog/application-notes-reed-relays-0](http://www.cynergy3.com/blog/application-notes-reed-relays-0)

*Consult factory for UL ratings

Contact Specification	Conditions	Units	S2-03P		S2-XXP	S2-XXE
Material			Ruthenium		Rhodium	Rhodium
Switch atmosphere			Pressurised		Pressurised	Vacuum
Isolation across contacts		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
Life time operations	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	

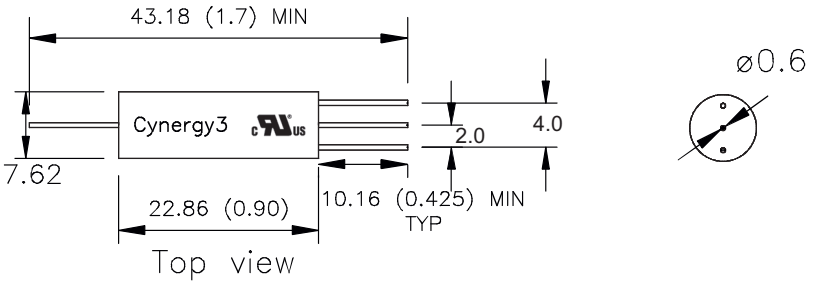
Coil Specification			3V		5V	12V	24V
Must operate voltage	@20°C	Volts DC	2.25		3.7	9	19
Must release voltage	@20°C	Volts DC	0.5		1	2	3
Operate time inc bounce	@20°C	Milliseconds	0.1		1.0	1	11
Release time inc bounce	@20°C	Milliseconds	0.07		0.5	0.5	0.5
Resistance	@20°C	Ohms	250		160	1000	1000

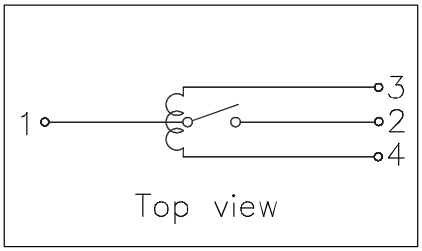
Relay Specification			
Isolation contact /coil min.		Volts DC	1000
Insulation resistance contact to coil	500V DC, 60 sec, 20°C ±5°C, 45% Rh	Ohms	T.B.C.
Operating temp range		°C	-40 to +85
Storage temp range		°C	-40 to +125

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

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

Mechanical Dimensions





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ISO9001 CERTIFIED

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