

# S1 Twin Relay Series

## UL Approved\* Miniature High Voltage Relay

- Single-in-line package
- 1.5kV Isolation Voltage across contacts
- Isolation Voltage 1.5kV contact to coil
- 1.3A carry current
- Up to 1000V switching voltage



Actual device may differ

The S1-TWIN switch relay series is a miniature high voltage single-in-line reed relay with two reed switches 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.

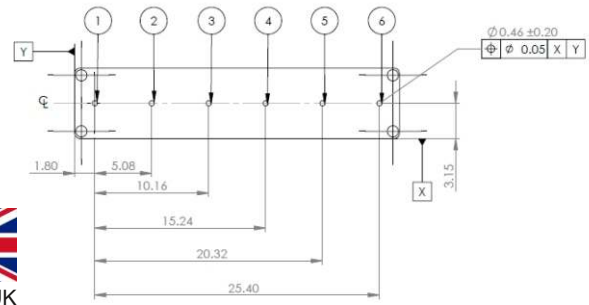
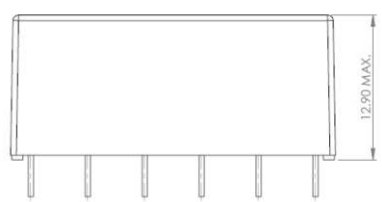
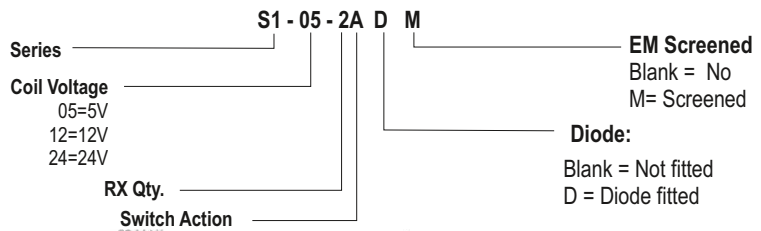
[Please refer to this document for circuit design notes:-](http://www.cynergy3.com/blog/application-notes-reed-relays-0)  
<http://www.cynergy3.com/blog/application-notes-reed-relays-0>

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

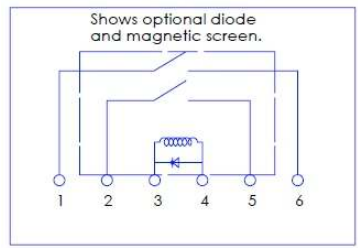
### \*Consult factory for UL ratings

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

Contact Specification	Conditions			
Switch action		2 x SPST (Form A)		
Material		Rhodium		
Isolation across contacts	kV DC or AC peak	1.5		
Switching Power Max.	W	10		
Switching Voltage Max.	V DC	1000		
Switching Current Max.	A DC	0.5		
Carry Current Max	A DC	1.3		
Capacitance across contacts	pF coil to screen grounded	0.2		
Contact Resistance	mΩmax	120		
Insulation Resistance	Ωmin (typical)	10 <sup>12</sup>		
Coil Specification (@ 20°C)		5V coil	12V coil	24V coil
Must Operate Voltage V	DC	3.75	9	18
Must Release Voltage V	DC	0.5	1.2	2.4
Operate Time(max)	ms diode fitted	0.75	0.75	0.75
Release Time (max)	ms diode fitted	0.3	0.3	0.3
Resistance	Ω (± 10%)	250	780	2000
Relay Specification				
Isolation contact to coil	kV DC	1.5		
Environmental				
Operating Temp range	°C	-40 to +85		
Storage Temp range	°C	-40 to +100		
Shock - EN 60068-2-27 11ms Half sine 50g. MIL-STD-202G Method 213B, Test condition A.				
Vibration - EN60068-2-6 Sine vibration 20g peak 10Hz to 2000Hz. MIL-STD-202G Method 204D, Test condition D.				
Part Numbering System (e.g. S1-05-2ADM)				



### Mechanical Dimensions



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**ISO9001 CERTIFIED**  
 cynergy3-s1-twin-v2

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