

S1 Relay Series



Actual device may differ

The S1 series is a miniature high voltage single-in-line reed relay 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>

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 sales@cynergy3.com.

Cynergy3 Components Ltd.
 7 Cobham Road
 Ferndown Industrial Estate
 Wimborne, Dorset BH21 7PE, UK
 Telephone: +44 (0)1202 897969
 Email: c3w_sales@sensata.com

ISO9001 CERTIFIED

cynergy3-s1-v2

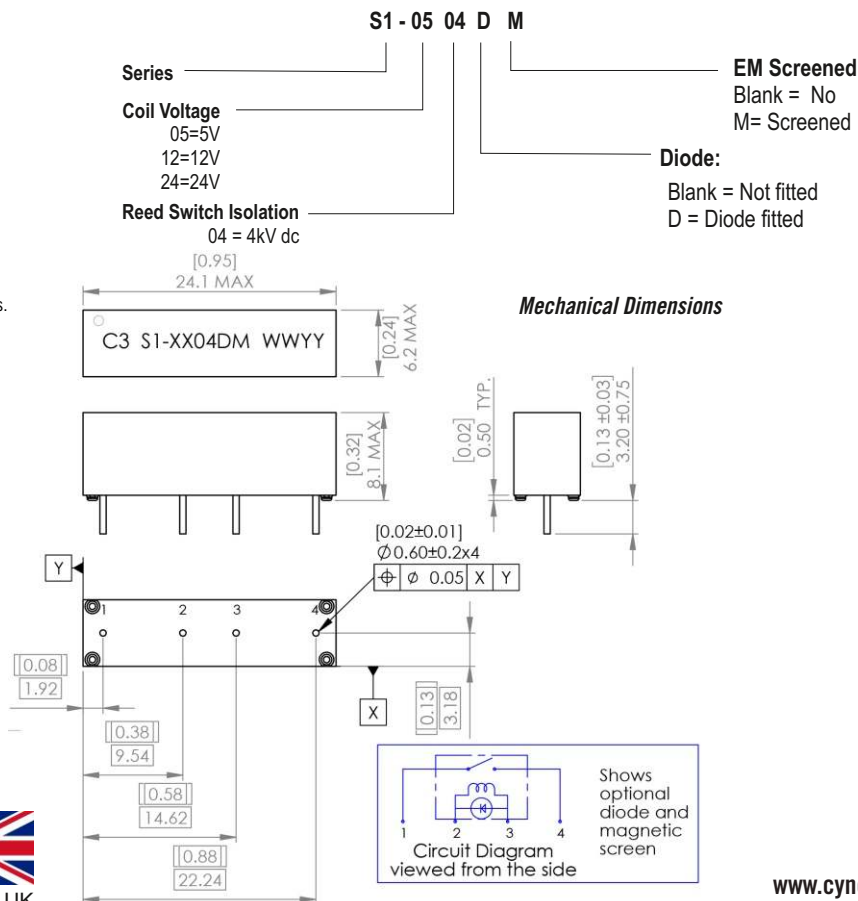


UL Approved* Miniature High Voltage Relay

- Single-in-line package
- 4kV Isolation Voltage across contacts
- Isolation Voltage 5kV contact to coil
- 2.5A carry current
- Up to 350V switching voltage



Contact Specification		Conditions		
Switch action		SPST (Form A)		
Material		Rhodium		
Isolation across contacts		4		
Switching Power Max.		100		
Switching Voltage Max.		350dc/300ac		
Switching Current Max.		1.0		
Carry Current Max	A DC	2.5		
Lifetime operations		10 ⁹		
Contact Resistance		100 mΩ max		
Insulation Resistance		10 ¹⁰ (10 ¹³) Ωmin (typical)		
Coil Specification (@ 20°C)		5V coil	12V coil	24V coil
Must Operate Voltage V DC		4	10.8	16
Must Release Voltage V DC		1	2	3
Operate Time ms diode fitted		1	1	1 (TBC)
Release Time ms diode fitted		0.5	0.5	0.5 (TBC)
Resistance Ω (± 10%)		180	500	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 Specification				
Isolation contact/coil kV DC		5		
Insulation resistance contact to all terminals Ωmin (typical)		TBC		
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				



www.cynergy3.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Sensata:

[S1-0504](#) [S1-1204](#) [S1-2404](#)