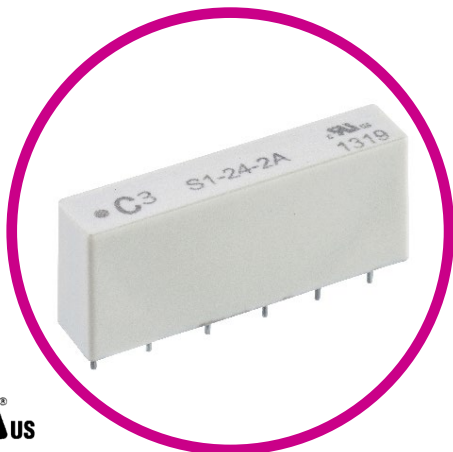




## | S1 TWIN RELAY SERIES

UL APPROVED\* MINIATURE HIGH VOLTAGE RELAY



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 center 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.

### Features

- 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

Please refer to this document for circuit design notes:

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

Custom versions can be made for particular applications.  
Please contact Sensata 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](mailto:c3w_sales@sensata.com).



## SPECIFICATIONS

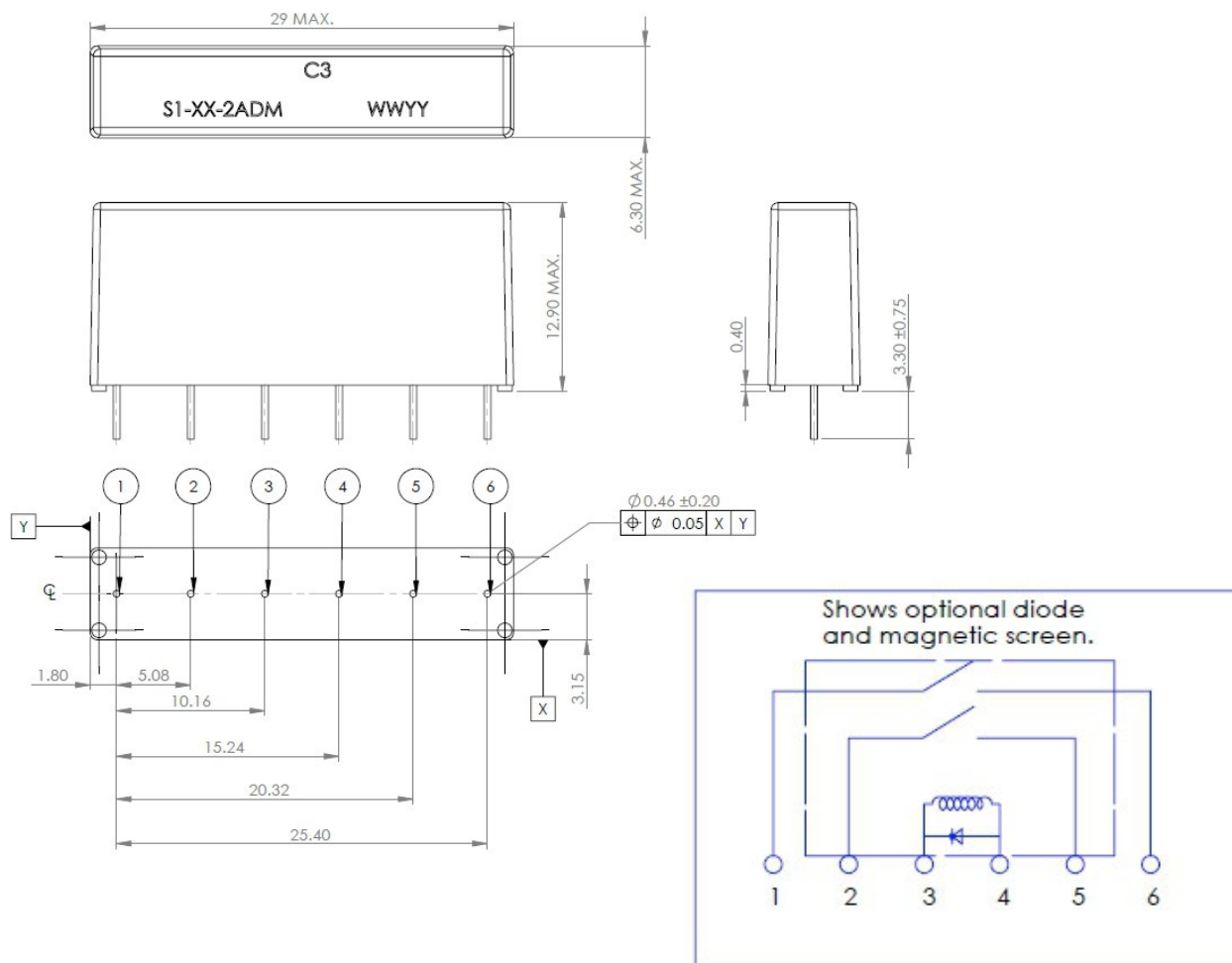
Contact	Condition	
Switch Action		2 x SPST (Form A)
Material		Rhodium
Isolation Across Contacts	kV DC or AC peak	1.5
Switching Power Max.	W	10
Switching Voltage Max.	V DC	1000
Switching Current Max.	A DC	0.5
Carry Current Max	A DC	1.3
Capacitance Across Contacts	pF coil to screen grounded	0.2
Contact Resistance	mΩ max	120
Insulation Resistance	Ω min (typical)	10 <sup>12</sup>

Coil (at 20°C)	Condition	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				
Isolation Contact/Coil	kV DC	1.5		
Environmental Conditions				
Operating Temperature Range	°C	-40 to +85		
Storage Temperature Range	°C	-40 to +100		
Shock - EN60068-2-27 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.				



## DIMENSIONS

All dimensions are in millimeters.





## ORDERING OPTIONS

Example : S1-05-2ADM

	<b>S1</b>	-	<b>05</b>	-	<b>2</b>		<b>A</b>		<b>D</b>		<b>M</b>
<b>Series</b>											
<b>Coil Voltage</b>											
<b>05</b> = 5V											
<b>12</b> = 12V											
<b>24</b> = 24V											
<b>RX Qty</b>											
<b>Switch Action</b>											
<b>Diode</b>											
<b>Blank</b> = Not fitted											
<b>D</b> = Diode fitted											
<b>EM Screened</b>											
<b>Blank</b> = No											
<b>M</b> = Screened											

Made in the UK

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[S1-12-2ADM](#) [S1-12-2AM](#) [S1-12-B](#) [S1-12-BD](#) [S1-12-BDM](#) [S1-12-BM](#) [S1-24-2A](#) [S1-24-2AD](#) [S1-24-2ADM](#) [S1-24-2AM](#) [S1-24-B](#) [S1-24-BD](#) [S1-24-BDM](#) [S1-24-BM](#)