

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







## S Series High Voltage relays



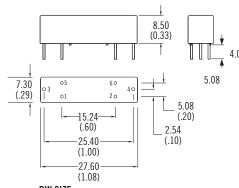


The S series relay was developed for the high voltage ATE market, where printed circuit board space is at a premium. The S series high voltage relay offers a 3kV or 5kV\* isolation performance in a 30mm package.

Low contact resistance, through the use of Rhodium contact reed switches, makes the S series suitable for many high voltage applications at DC and low frequency, where performance and reliability are paramount.

#### **Mechanical Dimensions**

All dimensions are in Milliemetres (inches)



#### PIN SIZE

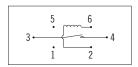
PINS 1, 2, 5 & 6 0.7 Square (0.025") PINS 3 & 4 0.8 (0.031") dia.

- Compact footprint
- Designed specifically for High Voltage ATE
- Rhodium contacts for Low Contact Resistance
- 3kV or 5kV\* Isolation between contacts and 5kV isolation between contacts and coil
- Excellent lifetime characteristics

Contact Specification Unit Condition			3kV SPNO		J	5kV SPNO		
Contact Material			Rhodium			Rhodium		
Isolation across contacts	kV	DC or AC peak	3		5*			
Switching Power Max.	W		10		10			
Switching Voltage Max.	V	DC or AC peak	20		20			
Switching Current Max.	A	DC or AC peak	0.5		0.5			
Carry Current Max	Α_	DC or AC peak	1.5		1.5			
Capacitance across contacts pF coil to screen grounded						<0.1		
Lifetime operations			109			109		
10W switching			10 <sup>6</sup>			10 <sup>6</sup>		
Contact Resistance $m\Omega$ max (typical)			80 (30)			80 (30)		
Insulation Resistance Ωmin (typical)			$10^{10} (10^{13})$		$10^{10} (10^{13})$			
*DC only, Pin 3 at high voltage								
Coil Specification at 20°C			5V	12V	24V	5V	12V	24V
							_	
Must Operate Voltage	٧	DC	3.7	9	20	3.7	9	20
Must Release Voltage	V	DC	0.5	1.25	4	0.5	1.25	4
Operate Time		ode fitted	1.0	1.0	1.0	1.0	1.	10
Release Time		ode fitted	0.5	0.5	0.5	0.5	0.5	0.5
Resistance	Ω		140	600	1000	140	600	1000
Relay Specification								
			5			5		
Isolation contact/coil	kV		5			5		
Isolation contact/coil	kV		5			5		
Insulation resistance contact	t	mical)	_		\	-	O13)	
Insulation resistance contact to all terminals		rpical)	_	010 (1013	)	5 10 <sup>10</sup> (1	013)	
Insulation resistance contact to all terminals Envirnonmental	t Ωmin (ty	rpical)	1	010 (1013		10 <sup>10</sup> (1		
Insulation resistance contact to all terminals	t	rpical)	1			-		

<u>Please refer to this document for circuit design notes:</u>
<a href="http://www.cynergy3.com/blog/application-notes-reed-relays-0">http://www.cynergy3.com/blog/application-notes-reed-relays-0</a>

#### Relay Circuit Diagram



(Viewed from Underside)

Pin 1 is top left, when viewed from above, with respect to part marking

**Part Numbering System** 

# Reed Switch Size Contact Form A=SPN0 Contact Material R=Rhodium, Moulding Ref. No. Coil Voltage 05=5Vdc, 12=12Vdc, 24=24Vdc

Cynergy3 Components Ltd. 7 Cobham Road Ferndown Industrial Estate Wimborne, Dorset BH21 7PE Telephone +44 (0) 1202 897969

Email:sales@cynergy3.com

#### ISO9001 CERTIFIED

S Series 2016

www.cynergy3.com

A R 9 12 05

Isolation between

**Contacts** 

3=3kV. 5=5kV