S Series High Voltage relays



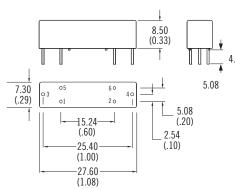


The S series relay was developed for the high voltage ATE market, where printed circuit board space is at a premium. The S series high voltage relay offers a 3kV or 5kV* isolation performance in a 30mm package.

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.

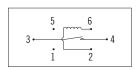
Mechanical Dimensions

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.

Relay Circuit Diagram



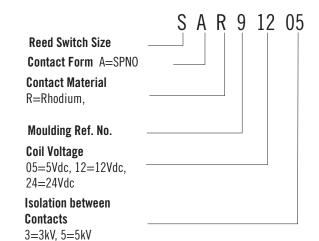
(Viewed from Underside)

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

- 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 SPNC)	5kV S	PNO		
Contact Material		Rhodium			ium		
Isolation across contacts kV DC or AC p	ak	3			5*		
Switching Power Max. W		10					
Switching Voltage Max. V DC or AC p	ak	20					
Switching Current Max. A DC or AC p	ak	0.5					
Carry Current Max A DC or AC p	ak	1.5					
Capacitance across contacts pF coil to scre	en grounded	<0.1					
Lifetime operations dry switching		109		10°			
10W switching		10 ⁶		10 ⁶			
Contact Resistance $m\Omega$ max (typical)		80 (30)			80 (30)		
Insulation Resistance Ω min (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 V 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 ms diode fitted	1.0	1.0	1.0	1.0	1.	10	
Release Time ms diode fitted	0.5	0.5	0.5	0.5	0.5	0.5	
Resistance Ω	140	600	1000	140	600	1000	
Relay Specification							
Isolation contact/coil kV		5		5			
Insulation resistance contact							
to all terminals Ω min (typical)		10 ¹⁰ (10 ¹³)		10 ¹⁰ (10 ¹³)			
Envirnonmental							
Operating Temp range °C		-20 to +70		-20 to +70			
		3.1		3.1			

Part Numbering System



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