



S series

high voltage reed relays

5kV, 10W

cynergy3 components™

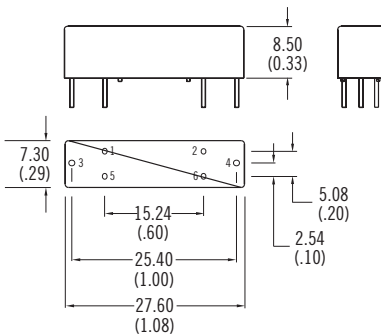
The S series was developed for the high voltage ATE market, where printed circuit board (PCB) space is at a premium, the S series high voltage reed relay offers a 3 or 5* kV isolation performance in a 30mm size package. With low contact resistance, the S series is suitable for many high voltage applications at DC and low frequency, where performance and reliability are paramount.



- # Compact Footprint
- # Designed Specifically for High Voltage
- # Rhodium Contacts for Low Resistance
- # 3 or 5kV * Isolation Between Contacts
- # Excellent Lifetime Characteristics

Mechanical Dimensions

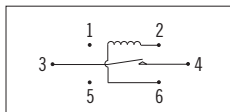
All dimensions are in Millimetres (inches)



PIN SIZE

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

CIRCUIT DIAGRAM



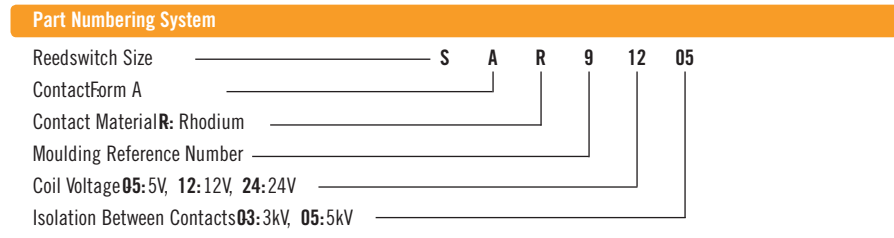
(Viewed from Underside)

Contact	Units	Conditions	3kV Form A	5kV Form A
Contact Materials			Rhodium	Rhodium
Isolation Across Contacts	kV	DC or AC peak	3	5*
Max. Switching Power	W		10	10
Max. Switching Voltage	V	DC or AC peak	20	20
Max. Switching Current	A	DC or AC peak	0.5	0.5
Max. Carry Current	A	DC or AC rms (60Hz)	1.5	1.5
Capacitance Across Contacts	pF	Coil/Screen Grounded	<0.1	<0.1
Lifetime	Operations	Dry Switching	10 ⁹	10 ⁹
Lifetime	Operations	10W Switching	10 ⁸	10 ⁸
Contact Resistance	mOhms	Maximum (Typical)	80 (30)	80 (30)
Insulation Resistance Contact to All Other Terminals	Ohms	Minimum (Typical)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)

Coil at 20°C		5V	12V	24V	5V	12V	24V	
Must Operate	V	DC	3.7	9	20	3.7	9	20
Must Release	V	DC	0.5	1.25	3	0.5	1.25	3
Operate Time	ms	Diode Fitted	1.0	1.0	1.0	1.0	1.0	1.0
Release Time	ms	Diode Fitted	0.5	0.5	0.5	0.5	0.5	0.5
Resistance	Ohms		140	600	1000	140	600	1000

Construction		5V	12V	24V	5V	12V	24V
Isolation Contact to Coil to All Other Terminals	kV Ohms	DC or AC peak Minimum (Typical)	5		5		
Environmental		Operating Temperature Range °C			-20 to +70		

Cynergy3 Parts	Coil Voltage Vdc	Isolation kV	Contact Material
SAR90503	5	3	Rhodium
SAR91203	12	3	Rhodium
SAR92403	24	3	Rhodium
SAR90505	5	5	Rhodium
SAR91205	12	5	Rhodium
SAR92405	24	5	Rhodium



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* DC only Pin 3 +HV

ISO 9001 CERTIFIED

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