



6 SERIES

MINIATURE FULLY SCREENED 4A, 3.5KV



A fully screened relay offering low RF loss and high current carrying capacity. Developed with RF engineers in the radio communications industry.

The relay coil is totally enclosed in a copper screen, resulting in lower self heating and RF loss.

Rhodium contacts are used in the vacuum reed switches, yielding higher carry currents for a given frequency and ambient temperature.

Coil connections are via PCB and RF connections can be either via PCB or flying lead.

Available with SPNO (Form A), SPNC (Form B) or latching (Bistable) switching action.

Features

- Excellent RF characteristics Low RF losses
- 4A Carry current (up to 30MHz)
- 3.5kV Isolation
- Custom versions can be designed to meet particular applications
- Long life expectancy



Contact	Units	Condition				
Contact Material			Rhodium Rhodium		Rhodium	
Switch Action			SPNO	SPNO SPNC		
Carry Current Max	А	RMS@30MHz	4.0*	4.0*	1.5*	
Switching Current	А	DC max	0.5	0.5	0.5	
Switching Power	W	max	10	10	10	
Switching Voltage Max	V	DC or AC peak	20	20	20	
Isolation Across Conacts	kV	DC or AC peak	3	3	3.5	
Capacitance	pF	coil/screen gnd	<0.1	<0.1	<0.1	
Contact Connections		pin position	3 & 4	3 & 4	3 & 4	
Lifetime	operations	dry switching	10 ⁹	10 ⁹	10 ⁹	
Contact Resistance	mΩ	max	80 (30)	80 (30)	80 (30)	
Insulation Resistance	mΩ	max (typical)	10 ¹⁰ (10 ¹³)	1010 (1013)	10 ¹⁰ (10 ¹³)	

^{*}see Graphical Data on page 3.



Coil at 20°C	Units	Condition								
Operating Voltage	V	Nominal	5	12	24	5	12	24	5	12
Must Operate Voltage	V		3.5	8	15	3.5	8	15	3	8
Must Release Voltage	V		1	2	4	1	2	4	Min Pulse	2ms
Resistance	Ω	Nominal	70	380	1500	65	350	1200	100 Set/Rest	500 Set/Rest
RF Screening			Full		Full		Full			
RF Screening Connection		pin position	1, 2, 5, 9		1, 2, 5, 9		1, 2, 5, 9			
Coil Connection		pin position	6 & 8		6 & 8		Set=6,7	Reset=7,8		
Relay										
Construction			Covered		Covered		Covered			
Operate Time	ms	max incl bounce	1.0		1.0		1.0			
Release Time	ms	max incl bounce	0.5		0.5		N/A			
Isolation Contact to all other Terminals	kV	DC max	3		3		3			
Isolation Contact to Screen	V	DC max	250		250		250			
Environmental Conditions										
Storage Temperature	°C	range	-40 to +125							
Operating Temperature	°C	limited current	-40 to +100*							
Weight	gm	typical	5.3 6.			6.1		5	.0	



	Action	Carry Current A	Coil Voltage V	Isolation kV
SAR605SD	SPN0	4	5	3
SAR612SD	SPN0	4	12	3
SAR624SD	SPN0	4	24	3
SLR612SD	Bistable	1.5	12	3.5

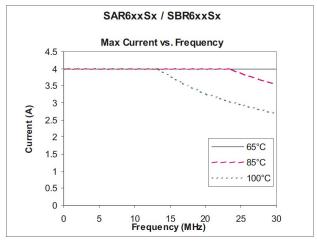
Please refer to this document for circuit design notes:

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

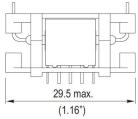


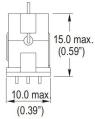


All dimensions are in millimeters.

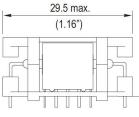


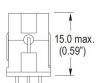
Flying Lead



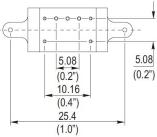


PCB Mount



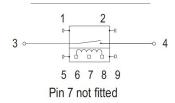


Pins 3, 4 require 1mm diameter ± 0.05 holes

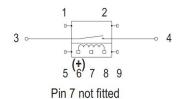


The following Pins require 0.9mm diameter \pm 0.05mm holes, where fitted 1, 2, 5, 6, 7, 8, 9

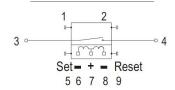
Circuit diagram, Form A



Circuit diagram, Form B

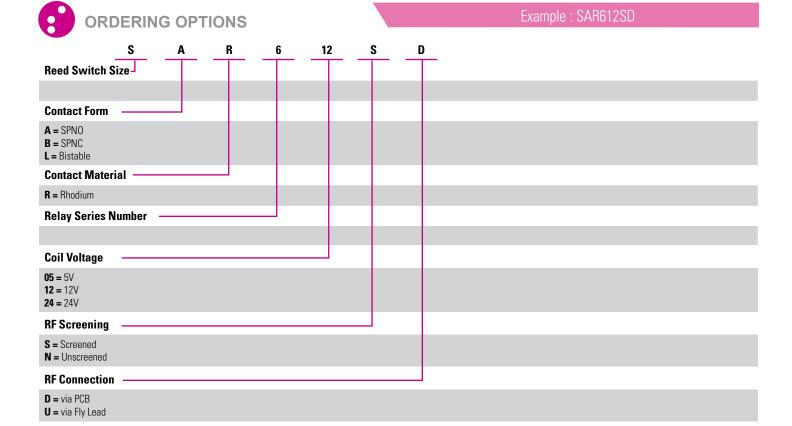


Circuit diagram, Latching



Please refer to this document for circuit design notes:

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





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