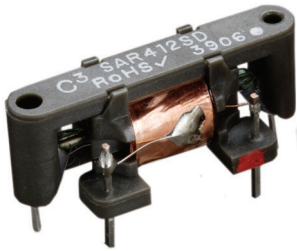


4 series

miniature screened, open frame reed relay

3.5 kV, 3.5A



- **3.5A RF at 1-30MHz**
- **3.5kV Isolation**
- **Contacts Form A, B or Latching**
- **Long Lifetime**

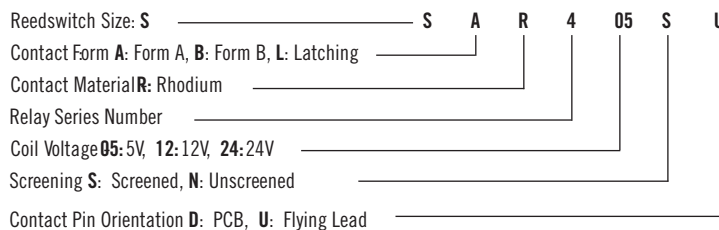
A highly flexible, low cost package for RF applications in the 1-30MHz band. The use of vacuum reed switches with rhodium contacts offers high isolation voltages, low contact resistance and long operating lifetime. Additional RF screening is available to further enhance RF performance for more demanding applications.

Available as Form A (SPNO), Form B (SPNC) or latching (bistable) contact configurations with switch connections via either PCB or flying lead.

Contact	Units	Conditions	Form A	Form B	Latching
Contact Material			Rhodium	Rhodium	Rhodium
Isolation across contacts	kV	DC or AC peak	3	3	3.5
Max. carry current	A	DC or AC rms	3.5*	3.5*	1.5
Max. switching power	W		10	10	10
Max. switching voltage	V	DC or AC peak	20	20	20
Max. switching current	A	DC or AC peak	0.5	0.5	0.5
Capacitance across contacts	pF	coil/screen grounded	<0.1	<0.1	<0.1
Lifetime	operations	dry switching	10 ⁹	10 ⁹	10 ⁹
Lifetime	operations	10W switching	10 ⁸	10 ⁸	10 ⁸
Contact Resistance	mOhms	maximum (typical)	80 (30)	80 (30)	80 (30)
Insulation Resistance	Ohms	minimum (typical)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)
ESR at 30MHz (no screen)	mOhms	typical	95 @ 3A rms	95 @ 3A rms	200 @ 1.5A rms
ESR at 30MHz (part screen)	mOhms	typical	80 @ 3A rms	80 @ 3A rms	180 @ 1.5A rms
Coil			5V 12V 24V	5V 12V 24V	5V 12V
Must Operate	V	DC, 20°C	3.5 8 15	3.5 8 15	3 7
Must Release	V	DC, 20°C	1 2 4	1 2 4	N/A N/A
Min Pulse Length	ms		N/A N/A N/A	N/A N/A N/A	2.0 2.0
Operate Time	ms		1.0 1.0 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	1.0 1.0
Resistance	Ohms	20°C	70 380 1500	65 350 1200	188 500
Construction					
Isolation contact to coil	kV	DC or AC peak	3	3	3.5
Capacitance contact to all other terminals	pF	Contacts open	<1.0	<1.0	<1.0
Capacitance contact to all other terminals	pF	Contacts closed	<1.5	<1.5	<1.5
Environmental					
Operating temperature range	°C	Limited Current	-40 to +100*	-40 to +100*	-40 to +100
Storage temperature range	°C		-40 to +125	-40 to +125	-40 to +125
Weight	gm	typical	3.5	4.2	3.1

*see graphical data overleaf

Part Numbering System



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

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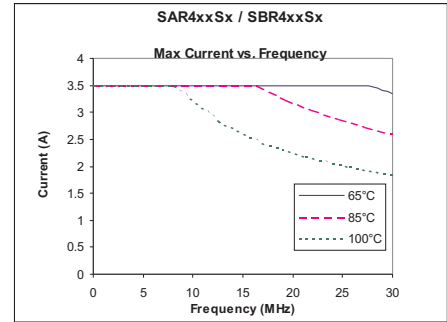
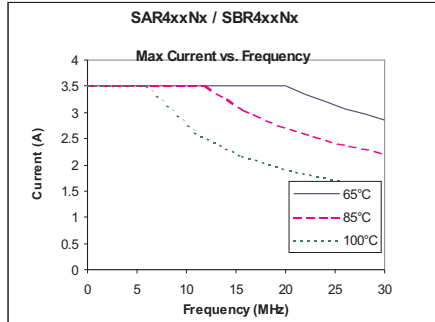
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4 series

miniature screened, open frame

3.5 kV, 3.5A

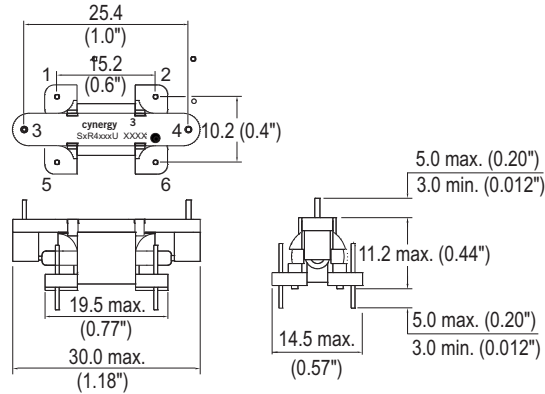


Mechanical Dimensions

All dimensions are in millimeters (inches)

Flying Lead

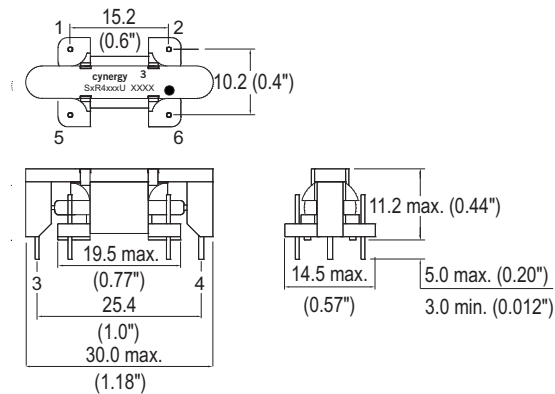
(Pins Up)



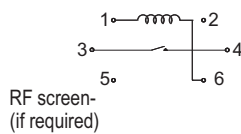
Pins 1, 2, 5 & 6 are 0.635mm square and require 0.9mm +/- 0.05m diameter holes
 Pins 3 & 4 are 0.8mm diameter

PCB Mount

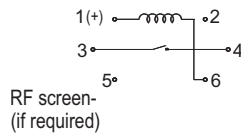
(Pins Down)



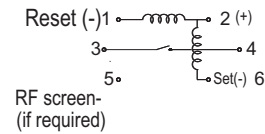
Circuit Diagram, Form A



Circuit Diagram, Form B



Circuit Diagram, Latching



(all circuit diagrams viewed from above)

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