

- Low Cost
- Form A, B or Latching Contacts
- Excellent RF Characteristics
- High Isolation Voltage
- Excellent Lifetime Characteristics
- Reed switch connections via PCB 'through-hole' or flying lead

## 4 Series Screened. 3.5kV, 3.5A

Developed for RF applications (in the band 1-30MHz) the 4 series reed relay offers a highly flexible, low cost package available with form A (NO), form B (NC) and latching (bistable) contact configurations as well as switch connections for either PCB or flying lead mounting. The use of Crydom's vacuum reed switches with rhodium contacts means that high isolation voltages, low contact resistance and long operating lifetimes are achieved. Additionally, RF screening is available to further enhance RF performance for more demanding applications.

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 <sup>9</sup>	10 <sup>9</sup>	10 <sup>9</sup>
Lifetime	operations	10W switching	10 <sup>9</sup>	10 <sup>9</sup>	10 <sup>9</sup>
Contact Resistance	mOhms	maximum (typical)	80 (30)	80 (30)	80 (30)
Insulation Resistance	Ohms	minimum (typical)	10 <sup>10</sup> (10 <sup>13</sup> )	10 <sup>10</sup> (10 <sup>13</sup> )	10 <sup>10</sup> (10 <sup>13</sup> )
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 AT 20°C			5V	12V	24V	5V	12V	24V	5V	12V
Must Operate	V	DC	3.5	8	15	3.5	8	15	3	7
Must Release	V	DC	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		70	380	1500	65	350	1200	100	500

RELAY					
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

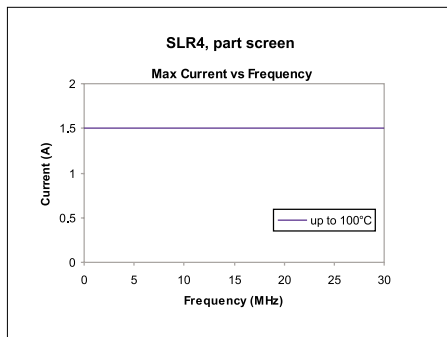
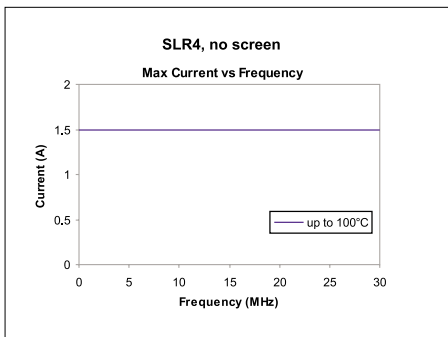
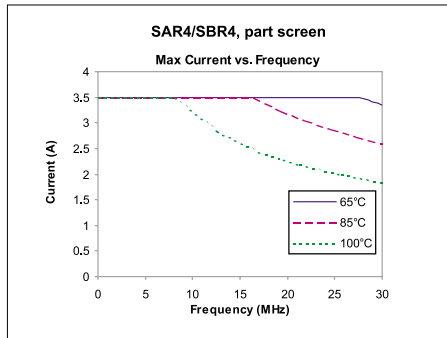
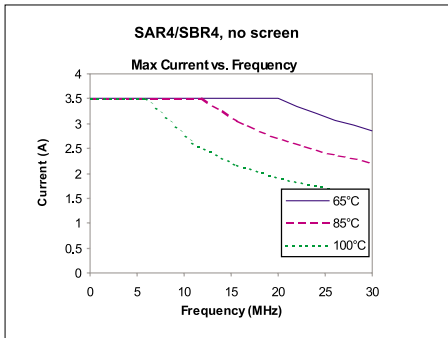
\*see graphical data

PART NUMBERING SYSTEM					
Reedswitch Size - S	S	A	R	4	05
Contact Form A: Form A, B: Form B, L: Latching					
Contact Material R: Rhodium					
Relay Series Number					
Coil Voltage 5: 5V, 12: 12V, 24: 24V					
Screening S: Screened, N: Unscreened					
Contact Pin Orientation D: PCB U: Flying Lead					

### CONTACT US NOW

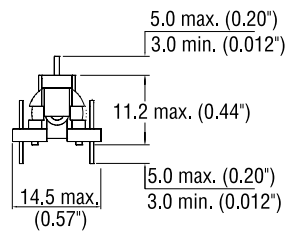
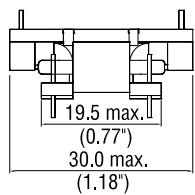
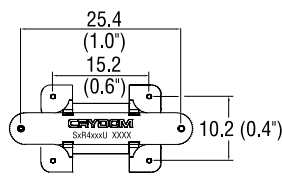
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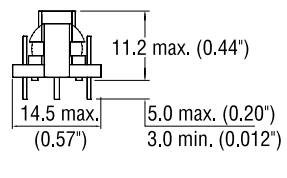
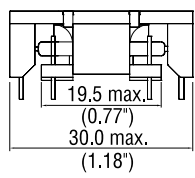


**MECHANICAL**

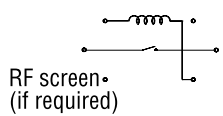
**Flying Lead**



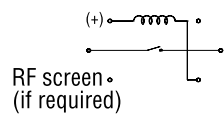
**PCB Mount**



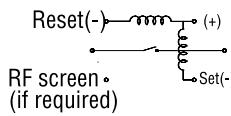
**Circuit Diagram, Form A**



**Circuit Diagram, Form B**



**Circuit Diagram, Latching**



(all circuit diagrams viewed from above)

