



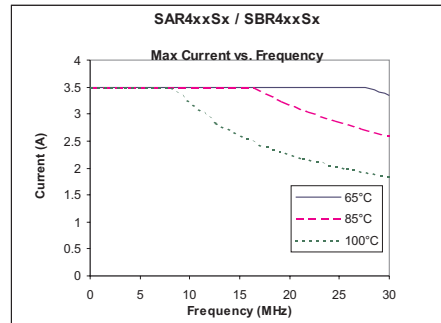
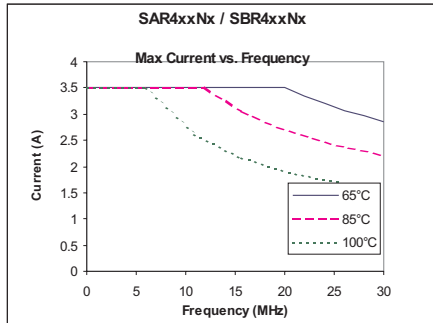
A highly flexible, low cost package for RF applications in the 1-30MHz band. The use of vacuum reed switches with rhodium contacts offers high isolation voltages, low contact resistance and long operating lifetime. Additional RF screening is available to further enhance RF performance for more demanding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

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

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 |

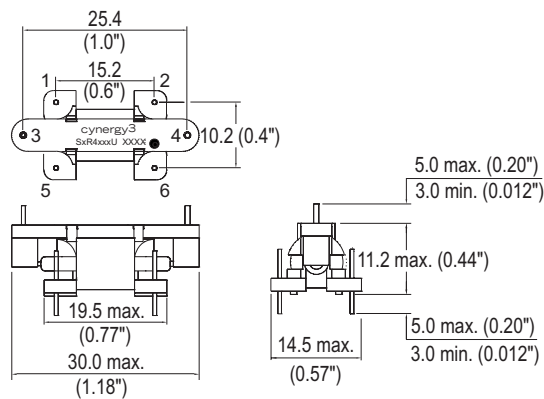
*see graphical data



Mechanical Dimensions

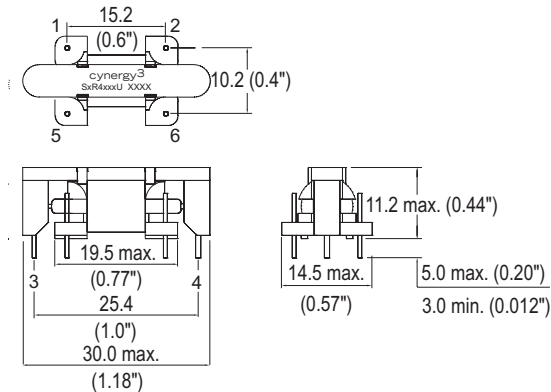
All dimensions are in millimeters (inches)

Flying Lead

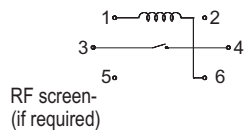


Pins 1, 2, 5, 6 require 0.9mm diameter ± 0.05mm holes

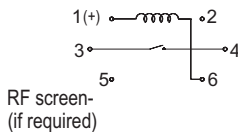
PCB Mount



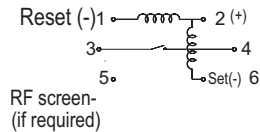
Circuit Diagram, Form A



Circuit Diagram, Form B



Circuit Diagram, Latching



(all circuit diagrams viewed from above)

ISO9001 Certified

USA
 Sales & Tech Support(866) 258-5057
 Email: sales@cynergy3.com
 Cynergy3 Components
 2320 Paseo de las Americas, Suite 104
 San Diego, CA 92154

EUROPE - UK
 Telephone +44 (0) 1202 897969
 Fax +44 (0) 1202 891918
 Email:sales@cynergy3.com
 Cynergy3 Components Ltd.
 7 Cobham Road
 Ferndown Industrial Estate
 Wimborne, Dorset BH21 7PE

ASIA - Thailand
 Telephone +66 (0)2 665 2517
 Fax +66 (0)2 665 2588
 Cynergy 3 Components, Asia
 18/8 Fico Place 12th Floor
 Soi Sukhumvit 21 (Asoke)
 Klongtoey Nua, Wattana
 Bangkok, Thailand 10110