Application - Sub-miniature reed switch with Rhodium contacts specifically designed for application where the available magnetic field is very low. Ideal for sensitive reed relays. Also useful for "wide - gap" security system applications and other magnetic systems requiring long operating distances with permanent magnets.

## Physical Characteristics

| Glass Diameter(Max) | 0.090in(2.3mm) |
| :--- | :--- |
| Glass length (Max) | $0.500 \mathrm{in}(12.7 \mathrm{~mm})$ |
| Lead Dia.(Nominal) | $0.018 \mathrm{in}(0.45 \mathrm{~mm})$ |
| Overall length (Max) | $2.125 \mathrm{in}(54.0 \mathrm{~mm})$ |



Electrical Characteristics

Contact Arrangement
Contact Material
(1) Power Rating

Switching Current (Max)
Switching Voltage(Max)
(2) Breakdown Voltage (Min.@20AT)
(3) Contact resistance

Insulation Resistance(Min)
Contact capacitance (Pf Max)
Operation Characteristics
Magnetic Sensitivity (Range - pull in)
Magnetic Sensitivity (Range - Drop Out)
Operate Time, including bounce (typ.)
Release Time (typ.)
Resonant Frequency (typ.)
Vibration, 10-2,000HZ(G's Max)
Shock, 11 -ms. 1/2 Sine wave (G's Max)
Operating Temperature
Storage temperature

Form A(SPST), Center Gap
Rhodium
10 VA Maximum
0.5Amp. DC, 0.5 Amp. AC

100 VDC, 125 VAC
200 Volts DC
150 Milliohms
$10^{12}$ ohms
0.3Pf

7 to 30 Ampere Turns
(see chart)
1.0Milliseconds
0.1 Milliseconds
3.2KHZ

50G
100G
$-40^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$
$-50^{\circ} \mathrm{C}$ to $+155^{\circ} \mathrm{C}$

Notes:

1) The specification for VA rating may sometimes be exceeded for less sensitive (higher AT) switches, and should be decreased for very sensitive (lower AT) switches. Standex Electronics will run life tests specific to a customers load upon request.
2) Breakdown voltage is measured in the presence of a radioactive ionizing source. Switch leakage current is limited to 100 microamperes.
3) Contact resistance measurements are made at 10 ma from a 1 volt source, with $50 \%$ overdrive, using a 4-wire (Kelvin) measuring system. Contact probes are located on 1.7" centers.

Minimum Switching Life with Standard Test Loads, using 20AT switches

| Voltage | 5 VDC | 10 VDC | 12 VDC | 24 VDC | 100 VDC | 125 VDC |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Current | 2 mA | 1 Amp | 10 mA | 10 mA | 100 mA | 80 mA |
| Life | $100 \times 10^{6}$ | $0.5 \times 10^{6}$ | $10 \times 10^{6}$ | $2 \times 10^{6}$ | $0.5 \times 10^{6}$ | $0.5 \times 10^{6}$ |

Note: End of life is defined as contact resistance exceeding one ohm and/or failure to operate.

Breakdown Voltage Plotted
Against Pull－In Ampere Turns


Change In Pull－In Ampere Turns After Switch Lead Cutting


Pull－In Ampere Turns Plotted
Against Drop－out Ampere Turns


Change In Drop－Out Ampere
After Switch lead Cutting


