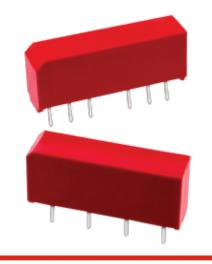
# **9000 SERIES/MOLDED SIP REED RELAYS**



勝特力材料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www. 100y. com. tw

.020 REF.

(0.51)

NOTE

▶ For RF Graph Performance, see "RF Graphs" section

of the Reed Relay Technical & Application Information

SEE LEAD DETAIL

.200 (Typ.) (5.08)

(3.4) Max.

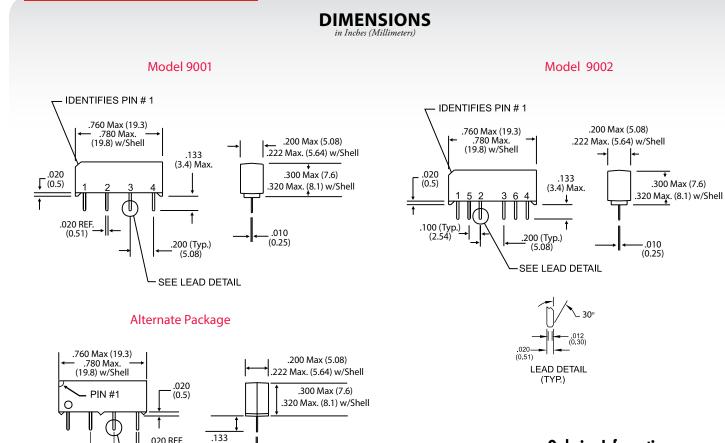
.010 (0.25)

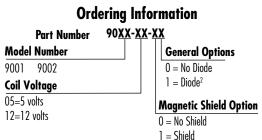
# 9000 Series High Performance SIP Reed Relays

The SIP relay is the industry standard when high reliability and consistent performance are desired in a compact package. The 9001 and 9002 are high performance relays ideally suited for Automatic Test Equipment, Instrumentation, RF and Telecommunications applications. The specification tables allow you to select the appropriate relay for your application.

### **9000 Series Features**

- High Insulation Resistance  $10^{12}\Omega$  minimum ( $10^{13}\Omega$  typical)
- High reliability, hermetically sealed contacts for long life (tested up to 1 Billion Operations)
- High dielectric strength available, consult factory
- High speed switching compared to electromechanical relays
- Molded thermoset body on integral lead frame design
- Coaxial Shield for  $50\Omega$  impedance and switching of fast rise time digital pulses - 9002 only
- Optional Coil Suppression Diode protects coil drive circuits
- ▶ UL File #E67117, CSA File #028537 Contact factory for details
- RoHS compliant





# 07082013

tel: (401) 943.2686

#### fax: (401) 942.0920

.300 Max (7.6)

-.010 (0.25)

#### **MODEL NUMBER** 9001<sup>2</sup> 9002<sup>2</sup> **Parameters Test Conditions** Units 4 Pin SIP 6 Pin SIP COIL SPECS. Nom. Coil Voltage VDC 5 12 5 12 VDC Max. Coil Voltage 15.0 6.5 6.5 15.0 **Coil Resistance** +/- 10%, 25° C Ω 500 1000 350 750 **Operate Voltage** VDC - Max. Must Operate by 3.75 9.0 3.75 9.0 **Release Voltage** VDC - Min. 0.4 1.0 Must Release by 0.4 1.0 CONTACT RATINGS Volts Switching Voltage Max DC/Peak AC Resist. 200 200 Switching Current Max DC/Peak AC Resist. Amps 0.5 0.5 **Carry Current** Max DC/Peak AC Resist. Amps 1.5 1.5 Contact Rating Max DC/Peak AC Resist. Watts 10 10 Life Expectancy-Typical<sup>1</sup> Signal Level 1.0V, 10mA x 10<sup>6</sup> Ops. 1000 1000 Static Contact 50mV, 10mA Ω 0.150 0.150 Resistance (max. init.) **Dynamic Contact** 0.5V, 50mA Ω 0.200 0.200 Resistance (max. init.) at 100 Hz, 1.5 msec **RELAY SPECIFICATIONS** Insulation Resistance Between all Isolated Pins Ω 10<sup>12</sup> 10<sup>12</sup> (minimum) at 100V, 25°C, 40% RH No Shield pF 0.7 Capacitance - Typical Shield Floating рF 0.8 Across Open Contacts Shield Guarding рF 0.1 No Shield рF 1.4 \_ рF Shield Floating **Open Contact to Coil** 1.4 Shield Guarding pF 0.5 Contact to Shield Contacts Open, Shield Floating pF 1.4 **Between Contacts** VDC/peak AC 300 300 **Dielectric Strength** VDC/peak AC Contacts to Coil 1500 (minimum) VDC/peak AC Contacts/Shield to Coil 1500 1500 **Operate Time - including** At Nominal Coil Voltage, 0.35 0.35 msec. bounce - Typical 30 Hz Square Wave **Release Time - Typical** 0.1 msec. 0.1 1 1 Top View: Dot stamped on relay refers to pin #1 勝特力材料 886-3-5753170 Grid = .1''x.1'' (2.54mm x 2.54mm) 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787

4

#### Notes:

 $^1$  Consult factory for life expectancy at other switching loads. Resistance >0.5 $\Omega$ 

defines end of life or failure to open.

Http://www.100y.com.tw

<sup>2</sup> Optional diode is connected to pin #2(+) and pin #3(-). Correct coil polarity must be observed.

## **Environmental Ratings:**

Storage Temp: -35°C to \*100°C; Operating Temp: -20°C to \*85°C; Solder Temp: 270°C max; 10 sec. max All electrical parameters measured at 25°C unless otherwise specified. Vibration: 20 G's to 2000 Hz; Shock: 50 G's 4