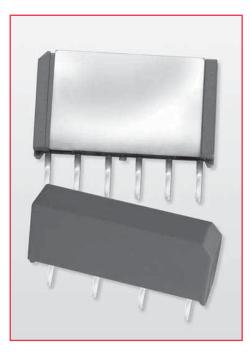
## 9091 & 9092 Miniature SIP Relays

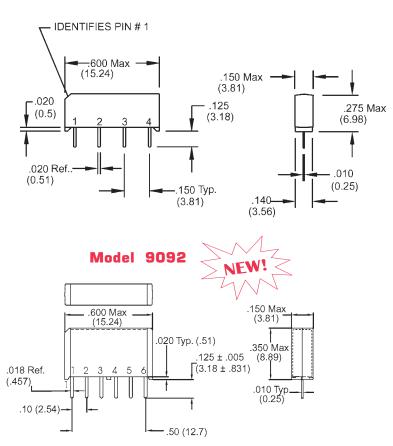


#### **Miniature Molded SIP Reed Relays**

The 9091 is a compact version of the 9001 using 40% less board space (LxW). Because of its increased height, the 9092 model allows for incorporation of 2 form A switches in the same board space. These miniature SIP relays utilize Coto's 10W switch technology, making these SIP relays ideal for use in ATE applications and other high reliability test, measurement and telecommunications applications where high board density and long life are key requirements.

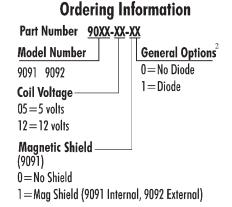
#### Series Features

- ◆ 9091 is a 10W SIP relay measuring .600" x .150" x .275"
- ◆ 9092 is a 10W SIP relay measuring .600" x .150" x .350"
- Magnetic shield reduces interaction
- Optional coil suppression diode protects coil drive circuits
- UL File # E67117
- High insulation resistance,  $10^{12} \Omega$  minimum
- High speed switching
- Molded thermoset body on integral lead frame design
- High reliability, hermetically sealed contacts for long life



大豪电子 电话: 0755-83233025 http://www.szdahao.com http://www.very-tec.com

Dimensions in Inches (Millimeters)

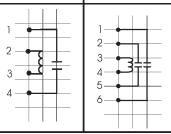


#### Model 9091

# 9091 & 9092 Miniature SIP Relays

				1
Model Number			<b>9091</b> <sup>2,4</sup>	<b>9092</b> <sup>2,4</sup>
Parameters	<b>Test Conditions</b>	Units	(10 Watt) 1 Form A SIP	(10 Watt) 2 2 Form A SIP
COIL SPECS.				
Nom. Coil Voltage		VDC	5 12	5 12
Max. Coil Voltage		VDC	6.5 15.0	6.5 15.0
Coil Resistance	+/- 10%, 25° C	Ω	500 1000	375 750
Operate Voltage	Must Operate by	VDC - Max.	3.75 9.0	3.75 9.0
elease Voltage	Must Release by	VDC - Min.	0.4 1.0	0.4 1.0
ONTACT RATINGS				
witching Voltage	Max DC/Peak AC Resist.	Volts	200	200
witching Current	Max DC/Peak AC Resist.	Amps	0.5	0.5
arry Current	Max DC/Peak AC Resist.	Amps	1.5	1.2
ontact Rating	Max DC/Peak AC Resist.	Watts	10	10
fe Expectancy-Typical <sup>1</sup>	Signal Level 1.0V, 10mA	x 10 <sup>6</sup> Ops.	500	500
tatic Contact	50mV, 10mA	Ω	0.125	0.140
esistance (max. init.)	30111V, 10111A	22	0.125	0.140
ynamic Contact	0.5V, 50mA	Ω	0.150	0.200
esistance (max. init.)	at 100 Hz, 1.5 msec		0.120	0.200
ELAY				
ECIFICATIONS				
sulation Resistance	Between all Isolated Pins	Ω	10 <sup>12</sup>	10 <sup>12</sup>
inimum)	at 100V, 25°C, 40% RH	77	10	10
apacitance - Typical				
cross Open Contacts		pF	0.1	1.0
pen Contact to Coil		pF	2.0	1.4
ielectric Strength	Between Contacts	VDC/peak AC	200	200
inimum)	Contacts to Coil	VDC/peak AC	1500	1500
berate Time - including	At Nominal Coil Voltage,			
unce - Typical	30 Hz Square Wave	msec.	0.5	0.75
elease Time - Typical	Zener-Diode Suppression <sup>3</sup>	msec.	0.30	0.5
				_

Top View: Grid = .1"x.1" (2.54mm x 2.54mm)



#### Notes:

<sup>1</sup>Consult factory for life expectancy at other switching loads. Resistance  $> 0.5\Omega$  defines end of life or failure to open.

<sup>2</sup>Optional diode is connected to pin #2(+) and pin

#3(-) for 9091; pin #3 (+) and pin #4(-) for 9092. Correct coil polarity must be observed.

<sup>3</sup>Consists of 56V Zener diode and 1N4148 diode in series, connected in parallel with coil.

<sup>4</sup>9091 internal mag shield. 9092 external mag shield.

### **Environmental Ratings:**

Storage Temp: -35°C to +100°C; Operating Temp: -20°C to +85°C Solder Temp: 270°C max; 10 sec. max The operate and release voltage and the coil resistance are specified at 25°C. These values vary by approximately 0.4% / °C as the ambient temperature varies. Vibration: 20 G's to 2000 Hz; Shock: 50 G's