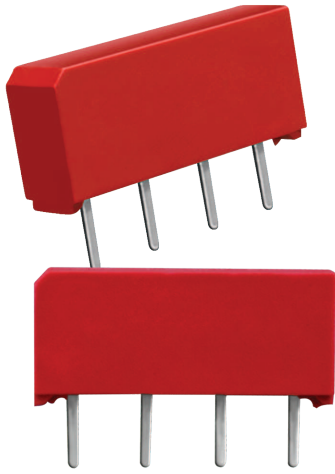


# 9094 HIGH POWER MINIATURE SIP REED RELAYS



## 9094 Series High Power Miniature Molded SIP Reed Relays

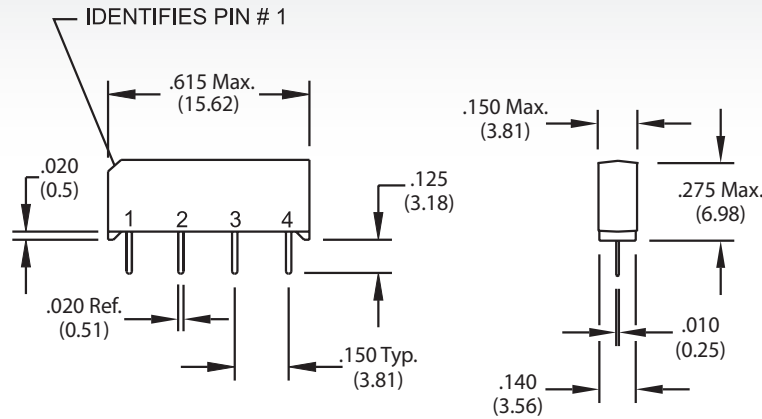
The 9094 Series is the high power 20W version of Coto Technology's industry standard 9091 MiniSIP relay. The robust contacts and small size of the 9094 series make it ideal for ATE and other high-reliability test and measurement applications where high board density and long life are key requirements.

### 9094 Series Features

- ▶ 9094 is a 20W SIP relay measuring .600" x .150" x .275"
- ▶ 40% less board space (LxW) than the 9001 series
- ▶ Optional coil suppression diode protects coil drive circuits
- ▶ High insulation resistance,  $10^{12}\Omega$  minimum
- ▶ Molded thermoset body on integral lead frame design
- ▶ High reliability, hermetically sealed contacts for long life
- ▶ RoHS compliant

## DIMENSIONS

*in Inches (Millimeters)*



## Ordering Information

Part Number **9094-XX-0X**

Model Number

9094

Coil Voltage

05=5 volts

12=12 volts

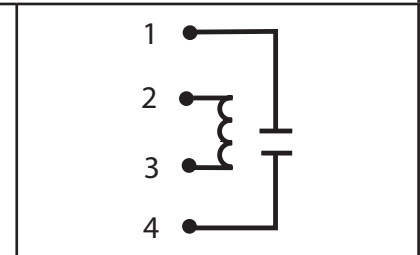
General Options<sup>2</sup>

0=No Diode

1=Diode

<b>MODEL NUMBER</b>			<b>9094<sup>2</sup></b>	
<b>Parameters</b>	<b>Test Conditions</b>	<b>Units</b>	<b>(20 Watt) 1 Form A SIP</b>	
<b>COIL SPECS.</b>				
Nom. Coil Voltage		VDC	5	12
Max. Coil Voltage		VDC	6.5	15.0
Coil Resistance	+/- 10%, 25° C	Ω	125	500
Operate Voltage	Must Operate by	VDC - Max.	3.75	9.0
Release Voltage	Must Release by	VDC - Min.	0.4	1.0
<b>CONTACT RATINGS</b>				
Switching Voltage	Max DC/Peak AC Resist.	Volts	200	
Switching Current	Max DC/Peak AC Resist.	Amps	0.5	
Carry Current	Max DC/Peak AC Resist.	Amps	1.5	
Contact Rating	Max DC/Peak AC Resist.	Watts	20	
Life Expectancy-Typical <sup>1</sup>	Signal Level 1.0V, 10mA	x 10 <sup>6</sup> Ops.	500	
Static Contact Resistance (max. init.)	50mV, 10mA	Ω	0.125	
Dynamic Contact Resistance (max. init.)	0.5V, 50mA at 100 Hz, 1.5 msec	Ω	0.150	
<b>RELAY SPECIFICATIONS</b>				
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10 <sup>12</sup>	
Capacitance - Typical Across Open Contacts		pF	0.1	
Open Contact to Coil		pF	2.0	
Dielectric Strength (minimum)	Between Contacts Contacts to Coil	VDC/peak AC VDC/peak AC	200 1500	
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	0.5	
Release Time - Typical		msec.	0.30	

Top View:  
Dot stamped on top of relay refers to pin #1 location  
Grid = .1"x.1" (2.54mm x 2.54mm)



#### Notes:

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