



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



9104 SERIES/HIGH VOLTAGE SIP REED RELAYS



9104 Series Hi Voltage SIP Reed Relays

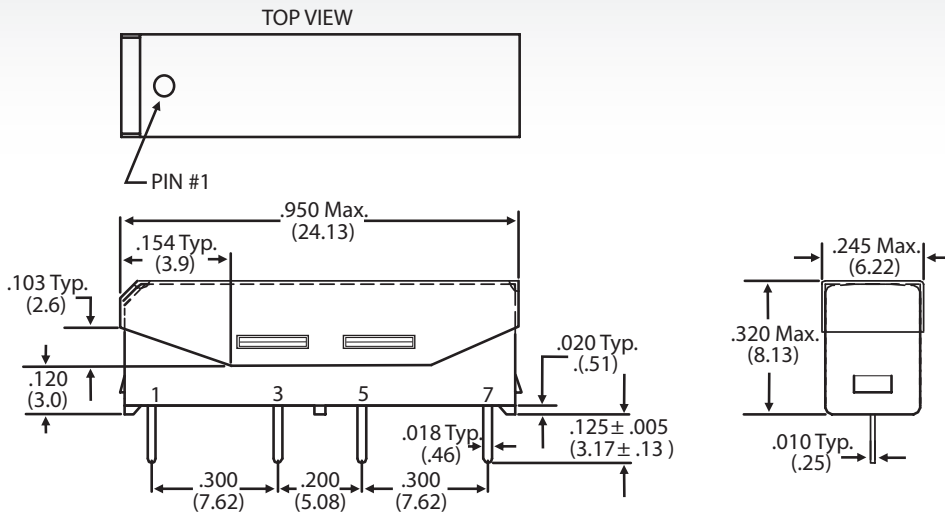
Molded SIP relays are the industry standard when high reliability and consistent performance are desired in a compact package. The 9104 Series adds high voltage switching capability and high voltage standoff capability to a SIP relay package. These high voltage, high performance relays are ideally suited for Automatic Test Equipment, Instrumentation, Battery Management, Solar and Process Control applications where voltage isolation is a key design requirement.

9104 Series Features

- ▶ High voltage switching up to 1000 V
- ▶ High dielectric strength (up to 3000 V DC)
- ▶ High Insulation Resistance – $10^{11}\Omega$ minimum
- ▶ High reliability, hermetically sealed contacts for long life
- ▶ High speed switching compared to electromechanical relays
- ▶ Molded thermoset body on integral lead frame design
- ▶ Optional Coil Suppression Diode – protects coil drive circuits
- ▶ Magnetic Shield – reduces interaction
- ▶ UL File #E67117 - Contact factory for details
- ▶ RoHS compliant

DIMENSIONS

in Inches (Millimeters)

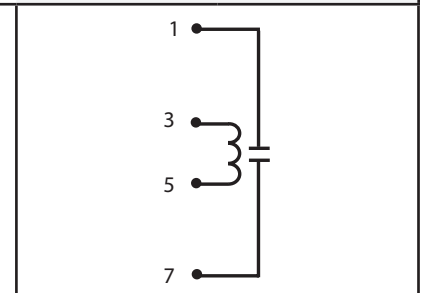


Ordering Information

Part Number	9XXX-XX-XX	General Options
Model Number	9104	0=No Diode 1=Diode ²
Coil Voltage	05=5 volts 12=12 volts	Dielectric Strength (Min) / Contacts Shield to Coil
		1=2000/3000 3=3000/3000

MODEL NUMBER			9104 ²
Parameters	Test Conditions	Units	4 Pin SIP
COIL SPECS.			
Nom. Coil Voltage		VDC	5 12
Max. Coil Voltage		VDC	6.5 15.0
Coil Resistance	+/- 10%, 25° C	Ω	175 500
Operate Voltage	Must Operate by	VDC - Max.	3.75 9.0
Release Voltage	Must Release by	VDC - Min.	0.5 1.0
CONTACT RATINGS			
Switching Voltage ³	Max DC/Peak AC Resist.	Volts	1000
Switching Current	Max DC/Peak AC Resist.	Amps	0.5
Carry Current	Max DC/Peak AC Resist.	Amps	1.3
Contact Rating	Max DC/Peak AC Resist.	Watts	10
Life Expectancy-Typical ¹	Signal Level 1.0V, 10mA	x 10 ⁶ Ops.	300
Static Contact Resistance (max. init.)	50mV, 10mA	Ω	0.150
Dynamic Contact Resistance (max. init.)	0.5V, 50mA at 100 Hz, 1.5 msec	Ω	0.200
RELAY SPECIFICATIONS			
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10 ¹¹
Capacitance - Typical Across Open Contacts	No Shield	pF	1.0
Open Contact to Coil	No Shield	pF	-
Dielectric Strength ⁴ (minimum)	Between Contacts Contacts/Shield to Coil	VDC/peak AC VDC/peak AC	2000 / 3000 2000 / 3000
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	0.75
Release Time - Typical		msec.	0.5

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



Notes:

- ¹ Consult factory for life expectancy at other switching loads.
- ² Optional diode is connected to pin #3(+) and pin #5(-). Correct coil polarity must be observed.
- ³ Switch current limited to 1.0mA @ 1000V.

Dielectric Strength	9104-XX-1X	9104-XX-3X
VDC/peak AC	2000/3000	3000/3000

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