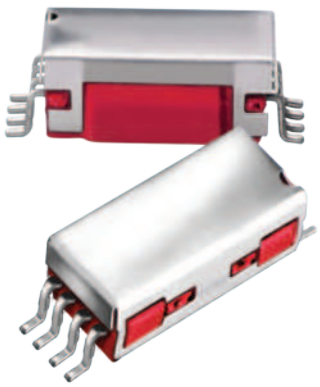
9814 & 9852 SURFACE MOUNT REED RELAYS



9814 & 9852 Series Surface Mount Reed Relays

Ideally suited to the needs of Automated Test Equipment, Instrumentation and Telecommunications requirements, Coto's 9814 & 9852 Series is a miniature Surface Mount Reed Relay that combines small size with exceptional RF performance. The 9814 extends life at ATE loads 3X or more utilizing Coto's proprietary switch technology. The external Magnetic Shield reduces interaction between parts in high density boards. The 9852 adds Form C capability. Small size plus added features allow for high density packing, and make these relays ideal for designs such as high speed, high pin count VLSI testers where high speed, small size and high performance are all needed.

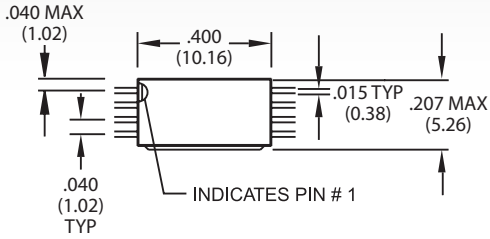
9814 & 9852 Series Features

- Available in Axial, Gull wing and "J" lead configurations
- Tape and Reel packaging available
- High reliability, hermetically sealed contacts for long life
- High Insulation Resistance - $10^{12}\,\Omega$ minimum (Form A)
- Coaxial shield for 50 Ω impedance
- 6.5 GHz bandwidth for RF and Pulse switching (fast rise time pulses)
- External Magnetic Shield
- RoHS compliant

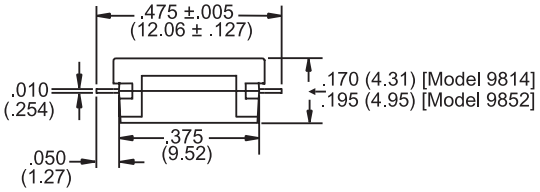
DIMENSIONS

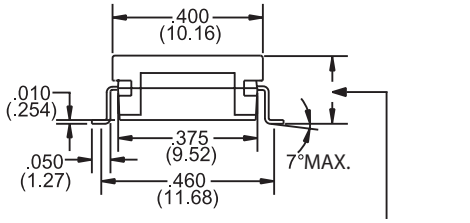
in Inches (Millimeters)

Models 9814 & 9852

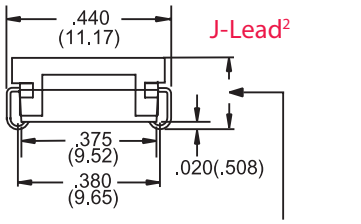


Axial[2]





Gull Wing[2]



J-Lead[2]

NOTE

- For RF Graph Performance, see "RF Graphs" section of the *Reed Relay Technical & Application Information*

Ordering Information

Part Number 9XXX-XX-XX

Model Number
9814 9852

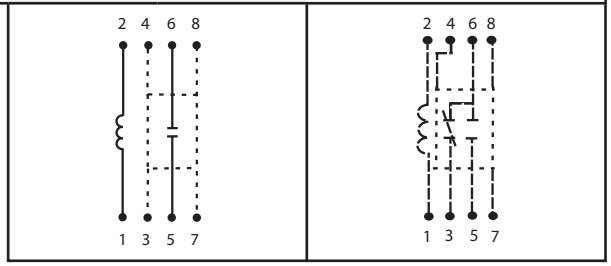
Coil Voltage
03 = 3.3 volts (9814)
05 = 5 volts

Lead Style
00 = Gull Wing
10 = Axial
20 = J-Lead

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MODEL NUMBER			9814	9852
Parameters	**Test Conditions**	**Units**	**1 Form A 50 Ω Coaxial**	**1 Form C 50 Ω Coaxial**
COIL SPECS.				
Nom. Coil Voltage		VDC	3.3 5	5
Max. Coil Voltage		VDC	4 6	6
Coil Resistance	+/- 10%, 25° C	Ω	70 150	110
Operate Voltage	Must Operate by	VDC - Max.	2.5 3.8	3.8
Release Voltage	Must Release by	VDC - Min.	0.4 0.4	0.4
CONTACT RATINGS				
Switching Voltage	Max DC/Peak AC Resist.	Volts	100	30
Switching Current	Max DC/Peak AC Resist.	Amps	0.25	0.1
Carry Current	Max DC/Peak AC Resist.	Amps	0.5	0.2
Contact Rating	Max DC/Peak AC Resist.	Watts	3	3
Life Expectancy-Typical[1]	Signal Level 1.0V, 10mA	x 10^6 Ops.	1000	100 N/C 200 N/O
Static Contact Resistance (max. init.)	50mV, 10mA	Ω	0.125	0.200
Dynamic Contact Resistance (max. init.)	0.5V, 50mA at 100 Hz, 1.5 msec	Ω	0.150	0.200
RELAY SPECIFICATIONS				
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10^{12}	10^9
Capacitance - Typical Across Open Contacts	No Shield Shield Floating Shield Guarding	pF pF pF	- - 0.2	- - 1.0
Open Contact to Coil	No Shield Shield Floating Shield Guarding	pF pF pF	- - 0.5	- - 1.0
Closed Contact to Coil	Shield Guarding	pF	0.5	0.5
Contact to Shield	Contacts Open, Shield Floating	pF	-	-
Dielectric Strength (minimum)	Between Contacts Contacts to Shield Contacts/Shield to Coil	VDC/peak AC VDC/peak AC VDC/peak AC	200 1500 1500	200 1000 1000
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	0.25	1.0
Release Time - Typical		msec.	0.05	1.0

Top View:
Dot stamped on top of relay refers to pin #1 location



Notes:

[1] Consult factory for life expectancy at other switching loads. Contact resistance 2.0Ω defines end of life.

[2] Surface mount component processing temperature: 500°F / 260°C max for 1 minute dwell time. Temperature measured on leads where lead exits molded package.

Environmental Ratings:

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

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