

9800 Series/Surface Mount Reed Relays



SURFACE MOUNT REED RELAYS

Ideally suited to the needs of Automated Test Equipment, Instrumentation and Telecommunications requirements, Coto's 9800 Series is an ultra-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 a 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 speed, size and performance are all needed.

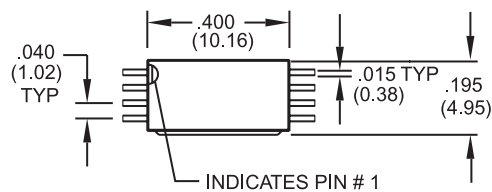
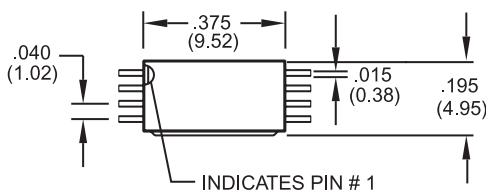
SERIES FEATURES

- ◆ 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

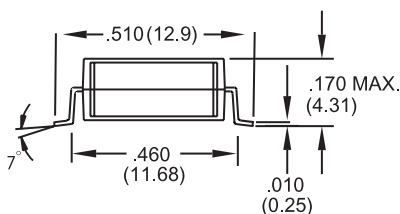
Model 9802

Models 9814 & 9852

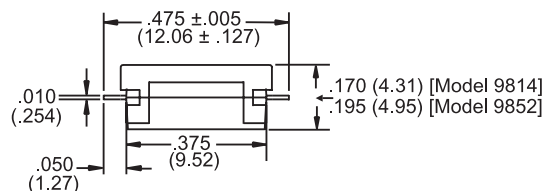
Dimensions in Inches (Millimeters)



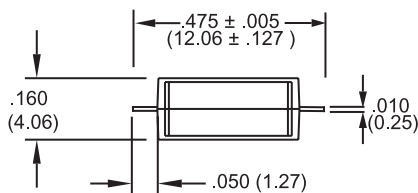
Gull Wing²



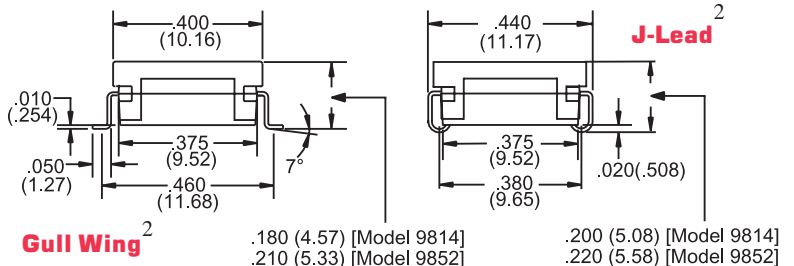
Axial²



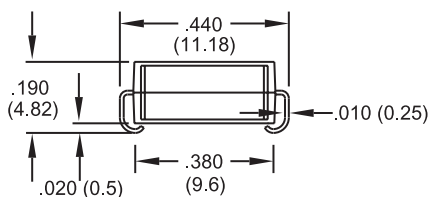
Axial²



J-Lead²



J-Lead²



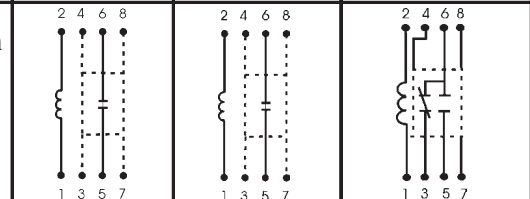
Ordering Information

| Part Number | 9XXX-XX-XX | Lead Style |
|--------------|---------------------------------------|---------------------------|
| Model Number | 9802 9814 9852 | 00 = Gull Wing |
| Coil Voltage | 03 = 3.3 volts (9814) 05 = 5 volts | 10 = Axial 20 = J-Lead |

9800 Series/Surface Mount Reed Relays

| Model Number | | | 9802 | 9814 | 9852 ⁴ |
|--|--|------------------------|--------------------------|--------------------------|--------------------------|
| Parameters | Test Conditions | Units | 1 Form A 50 Ω Coaxial | 1 Form A 50 Ω Coaxial | 1 Form C 50 Ω Coaxial |
| COIL SPECIFICATIONS | | | | | |
| Nom. Coil Voltage | | VDC | 5 | 3.3 5 | 5 |
| Max. Coil Voltage | | VDC | 6 | 4 6 | 6 |
| Coil Resistance | +/- 10%, 25° C | Ω | 150 | 70 150 | 110 |
| Operate Voltage | Must Operate by | VDC - Max. | 3.8 | 2.5 3.8 | 3.8 |
| Release Voltage | Must Release by | VDC - Min. | 0.4 | 0.4 0.4 | 0.4 |
| CONTACT RATINGS | | | | | |
| Switching Voltage | Max DC/Peak AC Resist. | Volts | 100 | 100 | 30 |
| Switching Current | Max DC/Peak AC Resist. | Amps | 0.25 | 0.25 | 0.1 |
| Carry Current | Max DC/Peak AC Resist. | Amps | 0.5 | 0.5 | 0.2 |
| Contact Rating | Max DC/Peak AC Resist. | Watts | 3 | 3 | 3 |
| Life Expectancy-Typical ¹ | Signal Level 1.0V,10mA | x 10 ⁶ Ops. | 250 | 1000 | 100N/C |
| Static Contact Resistance (max. init.) | 50mV, 10mA | Ω | 0.125 | 0.125 | 0.150 |
| Dynamic Contact Resistance (max. init.) | 0.5V, 50mA at 100 Hz, 1.5 msec | Ω | 0.150 | 0.150 | 0.150 |
| RELAY SPECIFICATIONS | | | | | |
| Insulation Resistance (minimum) | Between all Isolated Pins at 100V, 25°C, 40% RH | Ω | x 10 ¹² | 10 ¹² | 10 ⁹ |
| Capacitance - Typical Across Open Contacts | No Shield | pF | - | - | - |
| | Shield Floating | pF | - | - | - |
| | Shield Guarding | pF | 0.2 | 0.2 | 1.0 |
| Open Contact to Coil | No Shield | pF | - | - | - |
| | Shield Floating | pF | - | - | - |
| | Shield Guarding | pF | 0.5 | 0.5 | 1.0 |
| Closed Contact to Coil | Shield Guarding | pF | 0.5 | 0.5 | 0.5 |
| Contact to Shield | Contacts Open, Shield Floating | pF | - | - | - |
| Dielectric Strength (minimum) | Between Contacts | VDC/peak AC | 200 | 200 | 200 |
| | Contacts to Shield | VDC/peak AC | 1500 | 1500 | 1000 |
| | Contacts/Shield to Coil | VDC/peak AC | 1500 | 1500 | 1000 |
| Operate Time - including bounce - Typical / Max | At Nominal Coil Voltage, 30 Hz Square Wave | msec. | 0.25 | 0.25 | 1.0 |
| Release Time - Typical / Min | Zener-Diode Suppression ³ | msec. | 0.05 | 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.

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

⁴ Custom Coil Designs are available. Contact Coto.

Environmental Ratings

Storage Temp: -35°C to +100°C; Operating Temp: -20°C to +85°C
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

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкуренеспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru