

9300-9400 Series/Surface Mount Reed Relays



Surface Mount Reed Relays

Ideally suited to the needs of Automated Test Equipment, Instrumentation and Telecommunications requirements, Coto's 9300 and 9400 Series specification tables allow you to select the appropriate relay for your particular application. If your requirements differ, please consult your local representative or Coto's Factory to discuss a custom design.

Series Features

- ◆ High Insulation Resistance - $10^{12} \Omega$ minimum ($10^{13} \Omega$ Typical)
- ◆ High reliability, hermetically sealed contacts for long life
- ◆ Molded thermoset body on integral lead frame design
- ◆ High speed switching compared to electromechanical relays

9300 Series

- ◆ Load switching (15 Watts) and high dielectric strength (500 VDC) between contacts
- ◆ Proven Reliable to switch telephone loads (48V, 100mA)

9400 Series

- ◆ Small surface mount package (0.225" x 0.550")
- ◆ Low capacitance (Contact to Shield - 1.1 pF typical)
- ◆ Coaxial shield for 50 Ω impedance. Excellent for RF and Fast Rise Time Pulse switching (up to 2.0 GHz)

Model 9300

Dimensions in Inches
(Millimeters)

Model 9400

Gull Wing²



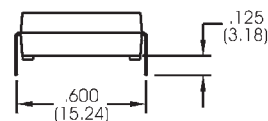
Gull Wing²

J-Lead²



J-Lead²

9301 End View



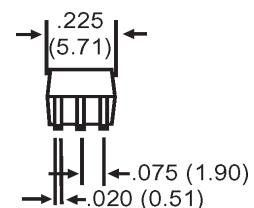
Radial

Ordering Information

| | |
|----------------|----------------------|
| Part Number | 9XXX-XX-XX |
| Model Number | Lead Style |
| 9301 9401 9402 | 00=Gull Wing |
| Coil Voltage | 20=J-Lead |
| 05=5 volts | 30=Radial (9301 N/A) |
| 12=12 volts | |

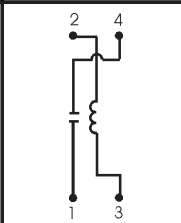
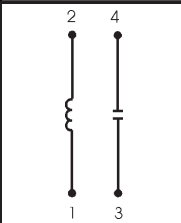
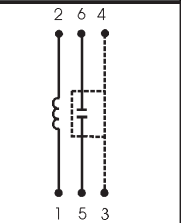


9401 End View
(J Lead Shown)



9402 End View
(J Lead Shown)

9300-9400 Series/Surface Mount Reed Relays

| Model Number | | | 9301 | 9401 | 9402 |
|--|--|------------------------|--|---|---|
| Parameters | Test Conditions | Units | 1 Form A | 1 Form A | 1 Form A 50 Ω Coaxial |
| COIL SPECS. | | | | | |
| Nom. Coil Voltage | | VDC | 5 12 | 5 12 | 5 12 |
| Max. Coil Voltage | | VDC | 6.5 15.0 | 6.2 15.0 | 6.2 15.0 |
| Coil Resistance | +/- 10%, 25° C | Ω | 350 1000 | 200 825 | 200 825 |
| Operate Voltage | Must Operate by | VDC - Max. | 3.75 9.0 | 3.75 9.0 | 3.75 9.0 |
| Release Voltage | Must Release by | VDC - Min. | 0.4 1.0 | 0.4 1.0 | 0.4 1.0 |
| CONTACT RATINGS | | | | | |
| Switching Voltage | Max DC/Peak AC Resist. | Volts | 200 | 200 | 200 |
| Switching Current | Max DC/Peak AC Resist. | Amps | 0.5 | 0.5 | 0.5 |
| Carry Current | Max DC/Peak AC Resist. | Amps | 1.5 | 1 | 1 |
| Contact Rating | Max DC/Peak AC Resist. | Watts | 15 | 10 | 10 |
| Life Expectancy-Typical ¹ | Signal Level 1.0V,10mA | x 10 ⁶ Ops. | 250 | 250 | 250 |
| Static Contact Resistance (max. init.) | 50mV, 10mA | Ω | 0.150 | 0.125 | 0.125 |
| Dynamic Contact Resistance (max. init.) | 0.5V, 50mA at 100 Hz, 1.5 msec | Ω | 0.200 | 0.150 | 0.150 |
| RELAY SPECIFICATIONS | | | | | |
| Insulation Resistance (minimum) | Between all Isolated Pins at 100V, 25°C, 40% RH | Ω | 10 ¹² | 10 ¹² | 10 ¹² |
| Capacitance - Typical Across Open Contacts | No Shield | pF | 0.7 | 0.2 | - |
| | Shield Floating | pF | - | - | 0.4 |
| | Shield Guarding | pF | - | - | 0.1 |
| Open Contact to Coil | No Shield | pF | 1.4 | 1.1 | - |
| | Shield Floating | pF | - | - | 1.1 |
| | Shield Guarding | pF | - | - | 0.1 |
| Contact to Shield | Contacts Open, Shield Floating | pF | - | - | 1.1 |
| | Between Contacts | VDC/peak AC | 500 ³ | 300 | 300 |
| Dielectric Strength (minimum) | Contacts to Shield | VDC/peak AC | - | - | 1500 |
| | Contacts/Shield to Coil | VDC/peak AC | 1500 | 1500 | 1500 |
| Operate Time - including bounce - Typical | At Nominal Coil Voltage, 30 Hz Square Wave | msec. | 0.40 | 0.40 | 0.40 |
| Release Time - Typical | Zener-Diode Suppression ⁴ | msec. | 0.10 | 0.20 | 0.20 |
| Top View: Dot stamped on top of relay refers to pin #1 location | | |  |  |  |

Notes:

- ¹Consult factory for life expectancy at other switching loads.
- ²Surface mount component processing temperature:
500°F / 260°C max for 1 minute dwell time. Temperature measured on leads where lead exits molded package.
- ³Higher dielectric strength available, consult factory.
- ⁴Consists of 56V Zener diode and 1N4148 diode in series, connected in parallel with coil.

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 «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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