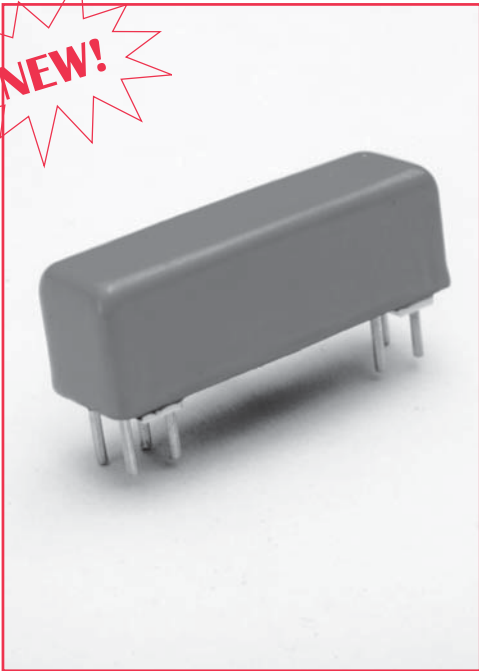


2970 Series Reed Relays for 125°C

NEW!

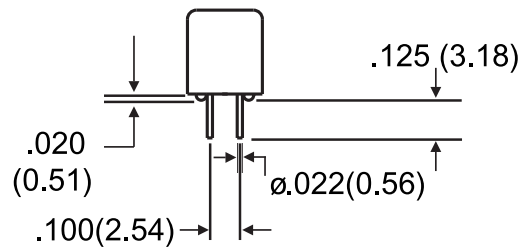
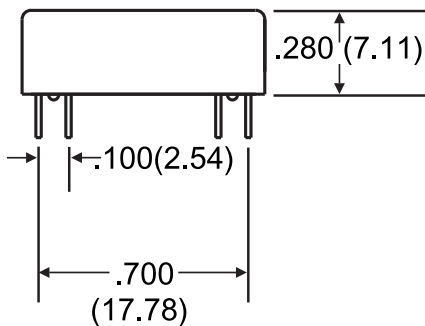


2970 Series Reed Relays

Ideally suited to the needs of Automated Test Equipment and RF requirements. The 2970 series offers a 1 Form A and 1 Form C coaxial relay for special 125°C testing environments. If your requirements differ, please consult your local representative or Coto's Factory.

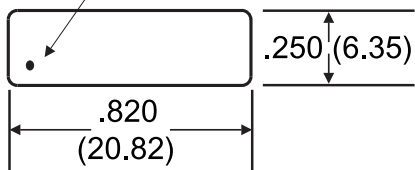
2970 Series Features

- ◆ Very small (0.20 in²), high reliability reed relays.
- ◆ High Insulation Resistance.
- ◆ Hermetically sealed contacts for long life.
- ◆ Epoxy coated steel shell provides magnetic shielding.
- ◆ Coaxial Shield for 50 Ω impedance and switching of fast rise time digital pulses.
- ◆ 125°C Operating Temperature.



Dimensions in Inches (Millimeters)

IDENTIFIES PIN #1



Top View

Ordering Information

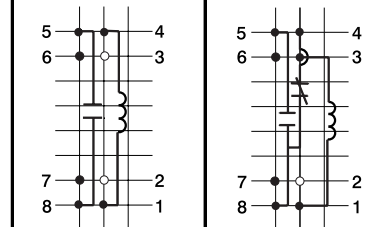
| | |
|---------------------|---------------------|
| Part Number | 297X-XX-00 |
| Model Number | |
| 2974 (Form 1A) | Coil Voltage |
| 2971 (Form 1C) | |
| | 05=5 volts |
| | 12=12 volts |

2970 Series Reed Relays for 125°C

NEW!

| Model Number | | | 2974 ² | | 2971 ² | |
|--|---|------------------------|-------------------|------|-------------------|------|
| Parameters | Test Conditions | Units | 1 Form A | | 1 Form C | |
| COIL RESISTANCE | | | | | | |
| Nom. Coil Voltage | | VDC | 5 | 12 | 5 | 12 |
| Coil Resistance | +/- 10%, 25° C | Ω | 230 | 1500 | 230 | 1500 |
| Operate Voltage | Must Operate by | VDC - Max. | 3.8 | 9.0 | 3.8 | 9.0 |
| Release Voltage | Must Release by | VDC - Min. | 0.4 | 1.0 | 0.4 | 1.0 |
| CONTACT RATING | | | | | | |
| Switching Voltage | Max DC/Peak AC Resist. | Volts | 200 | | 150 | |
| Switching Current | Max DC/Peak AC Resist. | Amps | 0.5 | | 0.25 | |
| Carry Current | Max DC/Peak AC Resist. | Amps | 1.5 | | 1.0 | |
| Contact Rating | Max DC/Peak AC Resist. | Watts | 10 | | 3 | |
| Life Expectancy-Typical ¹ | Signal Level 1.0V, 10mA | x 10 ⁶ Ops. | 500 | | 100 | |
| Static Contact Resistance (max. init.) | 50mV, 10mA | Ω | 0.100 | | 0.150 | |
| Dynamic Contact Resistance (max. init.) | 0.5V, 50mA at 100 Hz, 1.5 msec | Ω | 0.200 | | 0.200 | |
| RELAY SPECIFICATIONS | | | | | | |
| Insulation Resistance (minimum) | Between all Isolated Pins at 100V, 25°C, 40% RH | Ω | 10 ¹² | | 10 ¹¹ | |
| Capacitance - Typical Across Open Contacts | Shield Floating | pF | 1.0 | | 2.0 | |
| | Shield Guarding | pF | 0.3 | | 1.0 | |
| Dielectric Strength (minimum) | Between Contacts | VDC/peak AC | 350 | | 200 | |
| | Contacts to Shield | VDC/peak AC | 350 | | 200 | |
| | Contacts/Shield to Coil | VDC/peak AC | 1500 | | 1500 | |
| Operate Time - including bounce - Typical | At Nominal Coil Voltage, 30 Hz Square Wave | msec. | 0.5 | | 1.0 | |
| Release Time - Typical | Zener-Diode Suppression ³ | msec. | 0.1 | | 2.0 | |

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



Notes:

- ¹Consult factory for life expectancy at other switching loads.
- ² Pins #6 & #7 are tied to coaxial shield.
- ³Consists of 56V Zener diode and 1N4148 diode in series, connected in parallel with coil.

Environmental Ratings:

Storage Temp: -35°C to +125°C;
 Operating Temp: -20°C to +125°C
 Solder Temp: 270°C max; 10 sec. max
 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