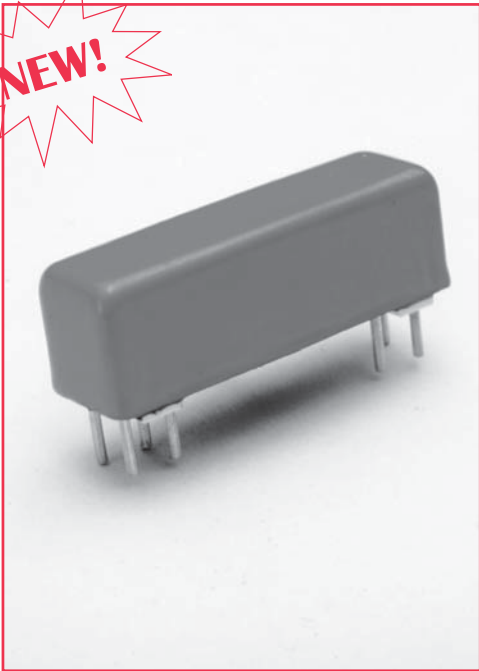


# 2970 Series Reed Relays for 125°C

**NEW!**

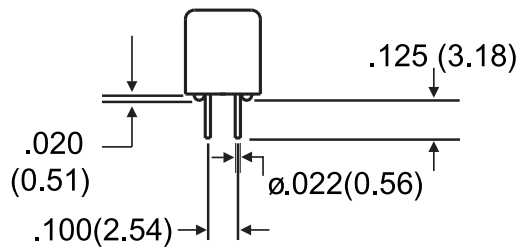
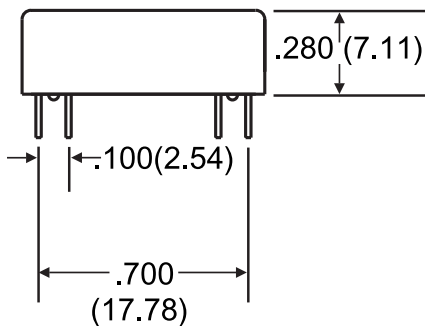


## 2970 Series Reed Relays

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.

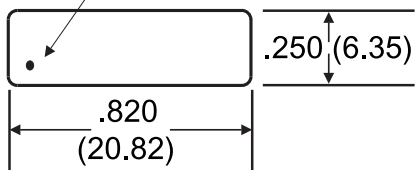
## 2970 Series Features

- ◆ Very small (0.20 in<sup>2</sup>), 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

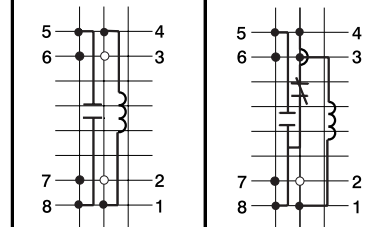
Part Number		297X-XX-00
<b>Model Number</b>		
2974 (Form 1A)		
2971 (Form 1C)		
	<b>Coil Voltage</b>	
	05=5 volts	
	12=12 volts	

# 2970 Series Reed Relays for 125°C

**NEW!**

Model Number			2974 <sup>2</sup>		2971 <sup>2</sup>	
Parameters	Test Conditions	Units	1 Form A		1 Form C	
<b>COIL RESISTANCE</b>						
Nom. Coil Voltage		VDC	5	12	5	12
Coil Resistance	+/- 10%, 25° C	Ω	370	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
<b>CONTACT RATING</b>						
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 <sup>1</sup>	Signal Level 1.0V, 10mA	x 10 <sup>6</sup> 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	
<b>RELAY SPECIFICATIONS</b>						
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10 <sup>12</sup>		10 <sup>11</sup>	
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 <sup>3</sup>	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:

- <sup>1</sup>Consult factory for life expectancy at other switching loads.
- <sup>2</sup> Pins #6 & #7 are tied to coaxial shield.
- <sup>3</sup>Consists 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