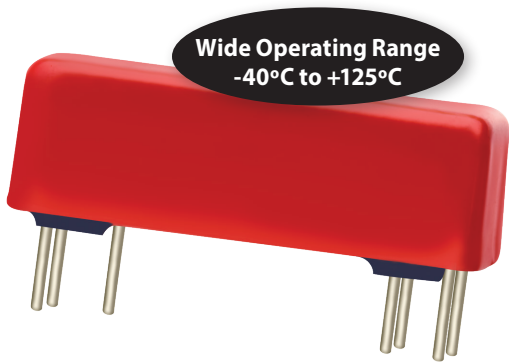


# 2970 SERIES REED RELAYS FOR -40°C TO 125°C



## 2970 Series Reed Relays

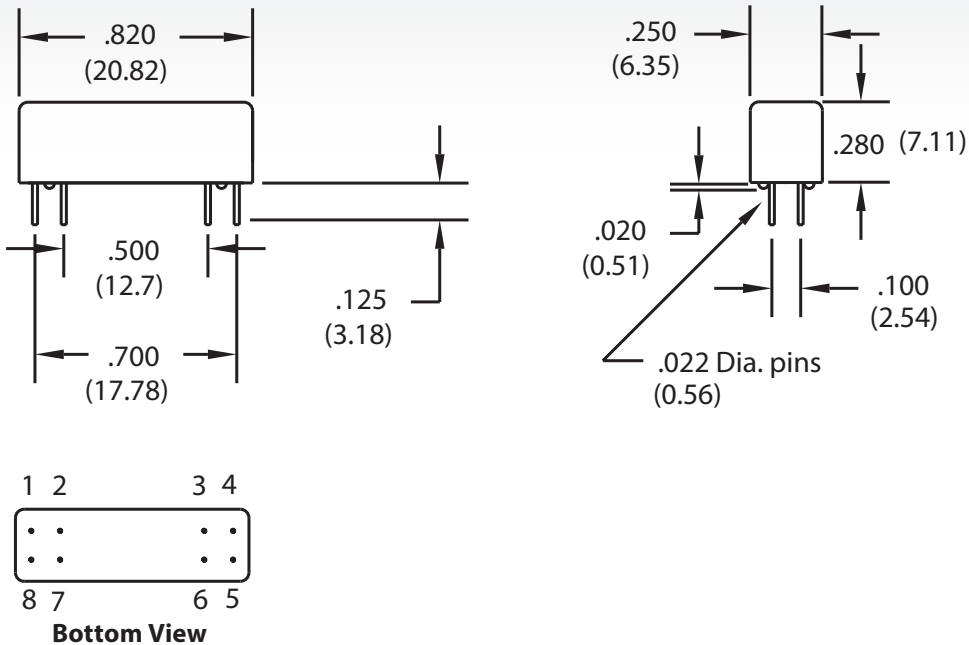
Ideally suited to the needs of Automated Test Equipment and Instrumentation. The 2970 series offers a 1 Form A and 1 Form C coaxial relay for special -40°C to +125°C testing environments. If your requirements differ, please consult your local representative or Coto's Factory.

## 2970 Series Features

- ▶ Coaxial shield for 50Ω impedance
- ▶ High Insulation Resistance
- ▶ Hermetically sealed contacts for long life
- ▶ Epoxy coated steel shell provides magnetic shielding
- ▶ Wide operating temperature range -40°C to +125°C
- ▶ RoHS compliant

## DIMENSIONS

*in Inches (Millimeters)*



## Ordering Information

Part Number 297X-XX-00

### Model Number

2974 (Form 1A)  
 2971 (Form 1C)

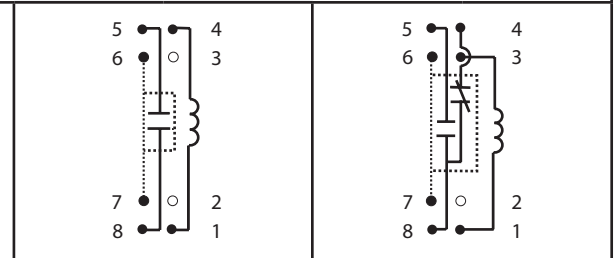
### Coil Voltage

05=5 volts  
 12=12 volts

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MODEL NUMBER			2974 <sup>2</sup>	2971 <sup>2</sup>
PARAMETERS	TEST CONDITIONS	UNITS	1 FORM A	1 FORM C
<b>COIL SPECS.</b>				
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.	2.5 6.7	2.5 6.7
Release Voltage	Must Release by	VDC - Min.	0.4 1.0	0.4 1.0
<b>CONTACT RATINGS</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>10</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		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> Model 2974 & 2971, pins #6 & #7 are tied to coaxial shield.

### Environmental Ratings:

*Storage Temp:* -40°C to +125°C; *Operating Temp:* -40°C to +125°C; *Solder Temp:* 270°C max; 10 sec. max  
 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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