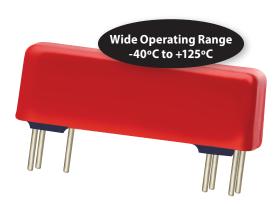
# 2970 SERIES REED RELAYS FOR -40°C TO 125°C

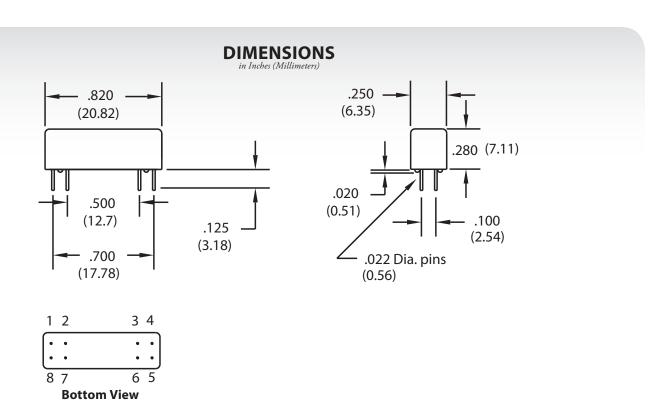


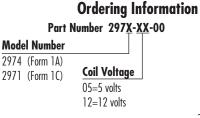
#### **2970 Series Reed Relays**

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  $50\Omega$  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





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<b>MODEL NUMBE</b>	R		<b>2974</b> <sup>2</sup>	2971 <sup>2</sup>
PARAMETERS	TEST CONDITIONS	UNITS	1 FORM A	1 FORM C
COIL SPECS.				
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
CONTACT RATINGS				
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
RELAY SPECIFICATION	NS			
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10 <sup>12</sup>	1010
Capacitance - Typical Across Open Contacts	Shield Floating Shield Guarding	pF pF	1.0 0.3	2.0 1.0
Dielectric Strength (minimum)	Between Contacts Contacts to Shield Contacts/Shield to Coil	VDC/peak AC VDC/peak AC VDC/peak AC	350 350 1500	200 200 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
	Dot stamped on top of relay refers Grid = .1"x.1" (2.5	Top View: to pin #1 location 54mm x 2.54mm)	5 4 6 0 7 0 2 1	5 • 4 6 • 3 7 • 0 8 • 1

#### **Notes:**

### **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

 $<sup>^{\</sup>mbox{\tiny $1$}}$  Consult factory for life expectancy at other switching loads.

<sup>&</sup>lt;sup>2</sup> Model 2974 & 2971, pins #6 & #7 are tied to coaxial shield.

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