2970 Series Reed Relays for 125°C

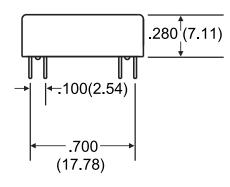


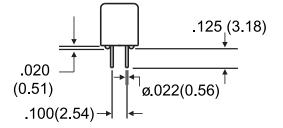
2970 Series Reed Relays

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.

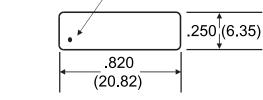
2970 Series Features

- Very small (0.20 in^2) , 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.

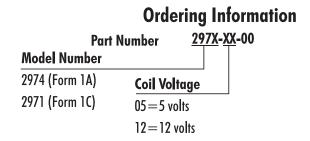




Dimensions in Inches (Millimeters)



Top View



IDENTIFIES PIN #1

2970 Series Reed Relays for 125°C

Test Conditions +/- 10%, 25° C Must Operate by Must Release by Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Units VDC Ω VDC - Max. VDC - Min. Volts Amps Amps Watts x 10 ⁶ Ops.	2974 ² 1 Form A 5 12 230 1500 3.8 9.0 0.4 1.0 200 0.5 1.5 10 500	2971 ² 1 Form C 5 12 230 1500 3.8 9.0 0.4 1.0 150 0.25 1.0 3 100
Must Operate by Must Release by Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Ω VDC - Max. VDC - Min. Volts Amps Amps Watts	$\begin{array}{cccc} 230 & 1500 \\ 3.8 & 9.0 \\ 0.4 & 1.0 \\ \end{array}$	$\begin{array}{cccc} 230 & 1500 \\ 3.8 & 9.0 \\ 0.4 & 1.0 \\ \end{array}$ $\begin{array}{c} 150 \\ 0.25 \\ 1.0 \\ 3 \end{array}$
Must Operate by Must Release by Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Ω VDC - Max. VDC - Min. Volts Amps Amps Watts	$\begin{array}{cccc} 230 & 1500 \\ 3.8 & 9.0 \\ 0.4 & 1.0 \\ \end{array}$	$\begin{array}{cccc} 230 & 1500 \\ 3.8 & 9.0 \\ 0.4 & 1.0 \\ \end{array}$ $\begin{array}{c} 150 \\ 0.25 \\ 1.0 \\ 3 \end{array}$
Must Operate by Must Release by Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	VDC - Max. VDC - Min. Volts Amps Amps Watts	3.8 9.0 0.4 1.0 200 0.5 1.5 10	3.8 9.0 0.4 1.0 150 0.25 1.0 3
Must Release by Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	VDC - Min. Volts Amps Amps Watts	0.4 1.0 200 0.5 1.5 10	0.4 1.0 150 0.25 1.0 3
Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Volts Amps Amps Watts	200 0.5 1.5 10	150 0.25 1.0 3
Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Amps Amps Watts	0.5 1.5 10	0.25 1.0 3
Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Amps Amps Watts	0.5 1.5 10	0.25 1.0 3
Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Amps Watts	1.5 10	1.0 3
Max DC/Peak AC Resist. Signal Level 1.0V, 10mA	Watts	10	3
Signal Level 1.0V, 10mA			-
-	x 10 ⁶ Ops.	500	100
50 X 10 A			
50 XI 10 A			
50mV, 10mA	Ω	0.100	0.150
0.5V, 50mA	Ω	0.000	0.200
at 100 Hz, 1.5 msec	77	0.200	0.200
Between all Isolated Pins			
at 100V, 25°C, 40% RH	Ω	10^{12}	10^{11}
Shield Floating			2.0
e	<u>^</u>		2.0
e e	-		200
	-		200
	-		1500
	, Depour ne	1000	1200
30 Hz Square Wave	msec.	0.5	1.0
	msec.	0.1	2.0
	Shield Floating Shield Guarding Between Contacts Contacts to Shield Contacts/Shield to Coil At Nominal Coil Voltage,	Shield FloatingpFShield GuardingpFBetween ContactsVDC/peak ACContacts to ShieldVDC/peak ACContacts/Shield to CoilVDC/peak ACAt Nominal Coil Voltage, 30 Hz Square Wavemsec.	Shield FloatingpF1.0Shield GuardingpF0.3Between ContactsVDC/peak AC350Contacts to ShieldVDC/peak AC350Contacts/Shield to CoilVDC/peak AC1500At Nominal Coil Voltage, 30 Hz Square Wavemsec.0.5

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 $+125^{\circ}$ C; Operating Temp: -20° C to $+125^{\circ}$ 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