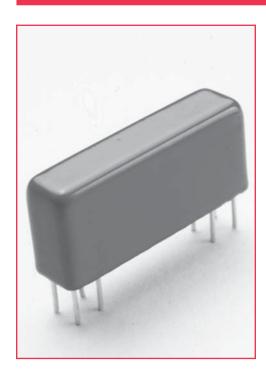
# **2300 Series Multi-Pole Reed Relays**

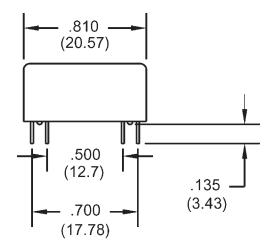


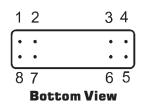
### Multi-Pole Reed Relays

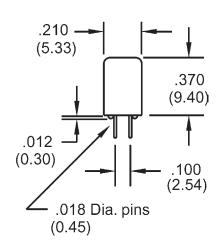
The Coto 2300 series is designed to offer the densest packaging available in a multipole reed relay. The size and footprint of the 2300 series complement the 2200 and 2900 series relays. The 1 Form C model is constructed with individual switch capsules for the normally open and magnetically biased normally closed contacts which are more reliable than the spring actuated 1 Form C reed switches. Custom pinouts as well as custom designs are available to meet particular applications. Special designs include 1 Form B, 2 Form B, latching, and high voltage relays.

#### 2300 Series Features

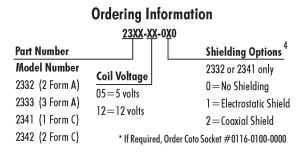
- ♦ Smallest Multipole Relay: 0.056 sq. inches/pole (3 pole relay)
- ◆ Up to 3 Form A or 2 Form C Contacts
- Hermetically Sealed Contacts
- Long Life / High Reliability
- Magnetically Shielding Steel Shell
- Optional Electrostatic Shield (on most models)







Dimensions in Inches (Millimeters)



## 2300 Series Multi-Pole Reed Relays

Model Number			2332	2333	2341 <sup>3,5</sup>	2342
Parameters	<b>Test Conditions</b>	Units	2 Form A	3 Form A	1 Form C	2 Form C
COIL SPECS.						
Nom. Coil Voltage Coil Resistance Operate Voltage Release Voltage	+/- 10%, 25° C Must Operate by Must Release by	VDC Ω VDC - Max. VDC - Min.	5 12 175 1000 3.8 9.0 0.4 1.0	5 12 175 1000 3.8 9.0 0.4 1.0	5 12 230 1000 3.8 9.0 0.4 1.0	5 12 175 1000 3.8 9.0 0.4 1.0
CONTACT RATINGS						
Switching Voltage Switching Current Carry Current Contact Rating Life Expectancy-Typical <sup>1</sup>	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 x 10 <sup>6</sup> Ops.	200 0.5 1.5 10 500	200 0.5 1.5 10 500	200 0.5 1.5 10 500	100 0.25 0.5 3 100
Static Contact Resistance (max. init.) Dynamic Contact Resistance (max. init.)	50mV, 10mA 0.5V, 50mA at 100 Hz, 1.5 msec	$\Omega$ $\Omega$	0.150 0.200	0.150 0.200	0.150 0.200	0.200 0.250
RELAY SPECIFICATIONS Insulation Resistance	Between all Isolated Pins	Ω	10 <sup>12</sup>	10 <sup>12</sup>	1012	10°
(minimum)  Capacitance - Typical  Across Open Contacts	at 100V, 25°C, 40% RH No Shield Shield Guarding	pF pF	0.8 0.2	0.8 N/A	1.7 0.7	2.0 N/A
Dielectric Strength (minimum)	Between Contacts Contacts to Shield Contacts/Shield to Coil	VDC/peak AC VDC/peak AC VDC/peak AC	250 1000 1000	250 N/A 1000	250 1000 1000	200 N/A 1000
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	0.5	0.5	0.5	1.5
Release Time - Typical	Zener-Diode Suppression <sup>2</sup>	msec.	0.15	0.15	0.5	2.0
Top View <sup>4</sup> :  Dot stamped on top of relay refers to pin #1 location  Grid = .1"x.1" (2.54mm x 2.54mm)			5 4 6 3 7 2 8 1	5 4 6 3 7 2 8 1	5 4 6 3 7 2 8 1	5 4 6 3 7 2 2 8 1

## Notes:

- <sup>1</sup> Consult factory for life expectancy at other switching loads.
- <sup>2</sup> Release time is specified with a zener diode suppression circuit consisting of a 20 V zener diode in series with a 1N4148, connected in parallel with the coil.
- <sup>3</sup> Break-before-make action on Form C Model 2341 is not guaranteed. Consult factory if break-before-make is required.
- <sup>4</sup> Electrostatic shield is connected to pin #6. Coaxial shield is connected to pins #6 and #7.
- <sup>5</sup> This relay is polarity sensitive. Pin #3 MUST be positive.

### **Environmental Ratings:**

Storage Temp: -35°C to +100°C; Operating Temp: -20°C to +85°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