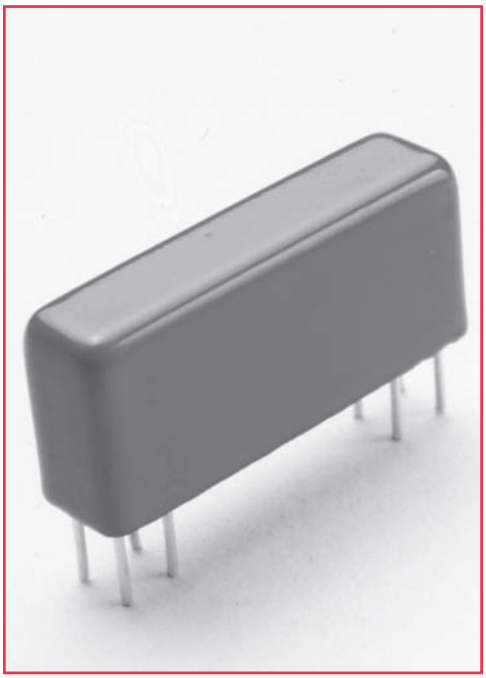
2300 Series Multi-Pole Reed Relays



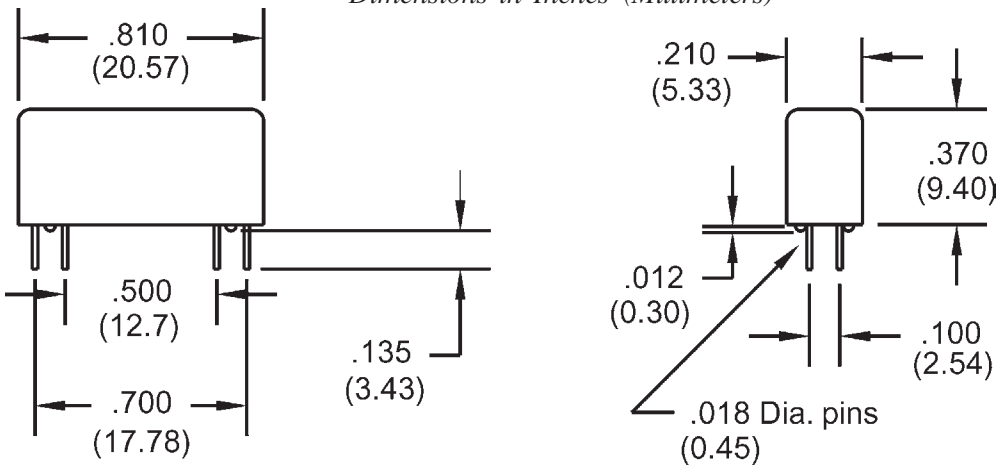
Multi-Pole Reed Relays

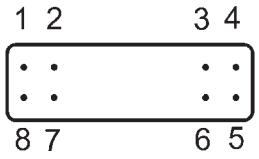
The Coto 2300 series is designed to offer the densest packaging available in a multi-pole reed relay. The size and footprint of the 2300 series complement the 2200 and 2900 series relays. The 1 Form C model is constructed with individual switch capsules for the normally open and magnetically biased normally closed contacts which are more reliable than the spring actuated 1 Form C reed switches. Custom pin-outs 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

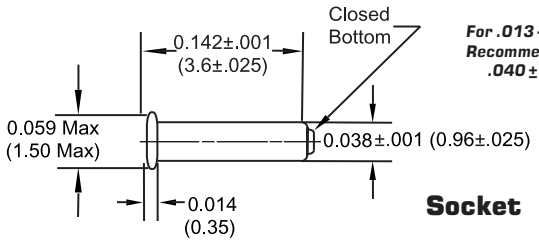
- Smallest Multi-pole Relay: 0.056 sq. inches/pole (3 pole relay)
- Up to 3 Form A or 2 Form C Contacts
- Hermetically Sealed Contacts
- Long Life / High Reliability
- Magnetically Shielding Steel Shell
- Optional Electrostatic Shield (on most models)

Dimensions in Inches (Millimeters)





Bottom View



Socket

Ordering Information

23XX-XX-0X0

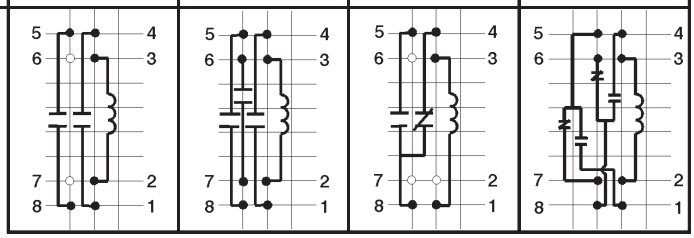
Part Number	Coil Voltage	Shielding Options[4]
Model Number		2332 or 2341 only
2332 (2 Form A)	05=5 volts	0=No Shielding
2333 (3 Form A)	12=12 volts	1=Electrostatic Shield
2341 (1 Form C)		2=Coaxial Shield
2342 (2 Form C)		

* If Required, Order Coto Socket #0116-0100-0000

2300 Series Multi-Pole Reed Relays

Model Number			2332	2333	2341[3,5]	2342
Parameters	**Test Conditions**	**Units**	**2 Form A**	**3 Form A**	**1 Form C**	**2 Form C**
COIL SPECS.						
Nom. Coil Voltage		VDC	5 12	5 12	5 12	5 12
Coil Resistance	+/- 10%, 25° C	Ω	175 1000	175 1000	230 1000	175 1000
Operate Voltage	Must Operate by	VDC - Max.	3.8 9.0	3.8 9.0	3.8 9.0	3.8 9.0
Release Voltage	Must Release by	VDC - Min.	0.4 1.0	0.4 1.0	0.4 1.0	0.4 1.0
CONTACT RATINGS						
Switching Voltage	Max DC/Peak AC Resist.	Volts	200	200	200	100
Switching Current	Max DC/Peak AC Resist.	Amps	0.5	0.5	0.5	0.25
Carry Current	Max DC/Peak AC Resist.	Amps	1.5	1.5	1.5	0.5
Contact Rating	Max DC/Peak AC Resist.	Watts	10	10	10	3
Life Expectancy-Typical [1]	Signal Level 1.0V, 10mA	x 10^6 Ops.	500	500	500	100
Static Contact Resistance (max. init.)	50mV, 10mA	Ω	0.150	0.150	0.150	0.200
Dynamic Contact Resistance (max. init.)	0.5V, 50mA at 100 Hz, 1.5 msec	Ω	0.200	0.200	0.200	0.250
RELAY SPECIFICATIONS						
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10^{12}	10^{12}	10^{12}	10^9
Capacitance - Typical Across Open Contacts	No Shield	pF	0.8	0.8	1.7	2.0
	Shield Guarding	pF	0.2	N/A	0.7	N/A
Dielectric Strength (minimum)	Between Contacts	VDC/peak AC	250	250	250	200
	Contacts to Shield	VDC/peak AC	1000	N/A	1000	N/A
	Contacts/Shield to Coil	VDC/peak AC	1000	1000	1000	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[2]	msec.	0.15	0.15	0.5	2.0

Top View [4]:
Dot stamped on top of relay refers to pin #1 location
Grid = .1"x.1" (2.54mm x 2.54mm)



Notes:

[1] Consult factory for life expectancy at other switching loads.
[2] Consists of 56V Zener diode and 1N4148 diode in series, connected in parallel with coil.
[3] Break-before-make action on Form C Model 2341 is not guaranteed. Consult factory if break-before-make is required.
[4] Electrostatic shield is connected to pin #6. Coaxial shield is connected to pins #6 and #7.
[5] 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