

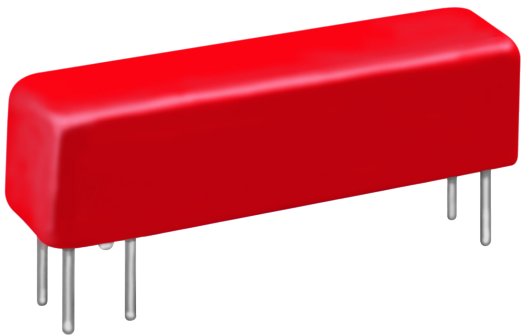
2200 SERIES REED RELAYS

2200 Series Reed Relays

Ideally suited to the needs of Automated Test Equipment and RF requirements. The specification tables allow you to select the appropriate relay for your particular application. If your requirements differ, please consult your local representative or Coto's Factory.

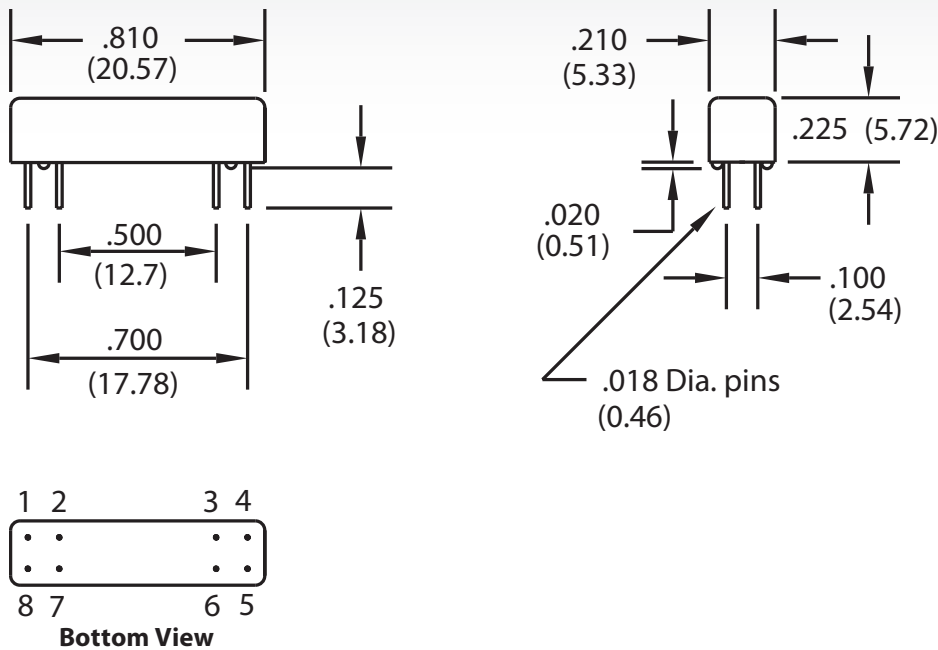
2200 Series Features

- ▶ Very small footprint (0.17 in²), high reliability reed relays
- ▶ High Insulation Resistance - 10¹² Ω available with model 2204
- ▶ High speed switching compared to electromechanical relays
- ▶ Hermetically sealed contacts for long life
- ▶ Epoxy coated steel shell provides magnetic shielding
- ▶ Optional Electrostatic Shield for reducing capacitive coupling
- ▶ Optional Coaxial Shield for 50Ω impedance and switching of fast rise time digital pulses offered on Form A
- ▶ Relay models 2200-2301, 2200-2302 are ATE industry standards
- ▶ Specifically engineered for OEM designs and maintenance of existing production fixtures
- ▶ RoHS compliant



DIMENSIONS

in Inches (Millimeters)

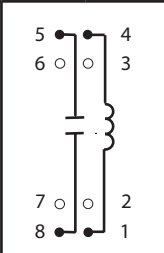
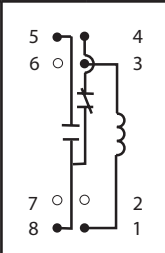
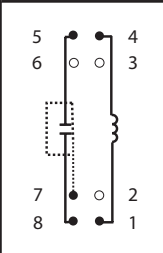
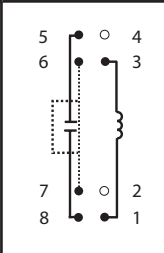


NOTE

▶ Model #'s 2200-2301 & 2200-2302 represent complete part numbers.

Ordering Information

Part Number	XXXX-XX-XX1	Shielding Options ²
Model Number		
2204		0=No Shielding
2211		1=Electrostatic Shield (N/A on Model #2211)
	Coil Voltage	2=Coaxial Shield (N/A on Model #2211)
	05=5 volts	
	12=12 volts	
	Coil Options	
	3=use for Model #2204 (12 volt coil) and Model #2211 (5 & 12 volt coil)	
	4=use for Model #2204 (5 volt coil)	

MODEL NUMBER			2204		2211		2200-2301		2200-2302	
Parameters	Test Conditions	Units	1 Form A		1 Form C		1 Form A Electrostatic Shield		1 Form A Coaxial Shield	
COIL SPECS.										
Nom. Coil Voltage		VDC	5 12		5 12		5		5	
Coil Resistance		+/- 10%, 25° C Ω	370 1500		230 1500		150		150	
Operate Voltage		Must Operate by VDC - Max.	3.8 9.0		3.8 9.0		3.6		3.6	
Release Voltage		Must Release by VDC - Min.	0.4 1.0		0.4 1.0		0.5		0.5	
CONTACT RATINGS										
Switching Voltage		Max DC/Peak AC Resist. Volts	200		100		150		150	
Switching Current		Max DC/Peak AC Resist. Amps	0.5		0.25		0.5		0.5	
Carry Current		Max DC/Peak AC Resist. Amps	1.0		0.5		1.0		1.0	
Contact Rating		Max DC/Peak AC Resist. Watts	10		3		10		10	
Life Expectancy-Typical ¹		Signal Level 1.0V, 10mA x 10 ⁶ Ops.	500		100		500		500	
Rated Loads		x 10 ⁶ Ops.	5		5		5		5	
Static Contact Resistance (max. init.)		50mV, 10mA Ω	0.100		0.150		0.150		0.150	
Dynamic Contact Resistance (max. init.)		0.5V, 50mA at 100 Hz, 1.5 msec Ω	0.200		0.200		0.200		0.200	
RELAY SPECIFICATIONS										
Insulation Resistance (minimum)		Between all Isolated Pins at 100V, 25°C, 40% RH Ω	10 ¹²		10 ¹¹		10 ¹¹		10 ¹¹	
Capacitance - Typical Across Open Contacts		Shield Floating pF	0.9		0.9		0.9		0.9	
		Shield Guarding pF	0.2		N/A		0.2		0.2	
Dielectric Strength (minimum)		Between Contacts VDC/peak AC	250		200		250		250	
		Contacts to Coil VDC/peak AC	250		N/A		250		250	
		Contacts/Shield to Coil VDC/peak AC	1500		1500		1500		1500	
Operate Time - including bounce		At Nominal Coil Voltage, 30 Hz Square Wave msec.	0.5 (typ.)		1.0 (typ.)		0.55 (max.)		0.55 (max.)	
Release Time - Typical		msec.	0.1		2.0		0.1		0.1	
Top View: 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 Model 2204, pin #7 is tied to optional electrostatic shield, pins #6 & #7 are tied to optional coaxial shield.

Environmental Ratings:

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