# 5500 Series/High Voltage Reed Relays

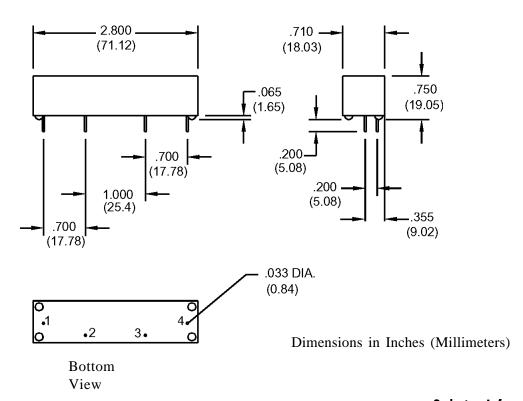


### HIGH VOLTAGE REED RELAYS

The 5500 Series High Voltage Reed Relays are ideally suited to the needs of Instrumentation, Industrial Process Controls and General Purpose requirements. The specification tables allow you to select the appropriate relay for your particular application. Applications include medical and hipot test instruments, and cable test equipment. If your requirements differ, please consult your local representative or Coto's Factory.

### 5500 Series Features

- ◆ High Dielectric Strength 10,000 Volts isolation across contacts.
- ◆ High Contact Rating 200 Watts.
- ◆ Hermetically sealed Tungsten contacts for long life.
- Low contact resistance  $0.030 \Omega$  typical.
- Magnetic Shield standard.
- Custom lead terminations and packages available.



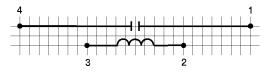
## **Ordering Information**

Part Number Model Number		<u> XXXX</u> - <u>XX</u> -1		
			Coil Voltage	
5501	5502		05=5 volts	
5503	5504		12=12 volts	
			24=24 volts	

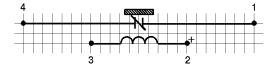
# 5500 Series/High Voltage Reed Relays

Model Number Parameters	Test Conditions	Units	5501 1 Form A High Voltage	5502 <sup>2</sup> 1 Form B High Voltage	5503 1 Form A Load Switching	5504 <sup>2</sup> 1 Form B Load Switching
COIL SPECS.		_		_		
Nom. Coil Voltage		VDC	5 12 24	5 12 24	5 12 24	5 12 24
Max. Coil Voltage		VDC	6.5 15 30	6.5 15 30	6.5 15 30	6.5 15 30
Coil Resistance	+/- 10%, 25° C	Ω	40 175 575	40 175 575	40 175 575	40 175 575
Operate Voltage	Must Operate by	VDC - Max.	3.75 9.0 18.0	3.75 9.0 18.0	3.75 9.0 18.0	3.75 9.0 18.0
Release Voltage	Must Release by	VDC - Min.	0.5 1.0 2.0	0.5 1.0 2.0	0.5 1.0 2.0	0.5 1.0 2.0
CONTACT RATINGS						
Switching Voltage	Max DC/Peak AC Resist.	Volts	7500	7500	3500	3500
Switching Current	Max DC/Peak AC Resist.	Amps	3.0	3.0	3.0	3.0
Carry Current	Max DC/Peak AC Resist.	Amps	5.0	5.0	5.0	5.0
Contact Rating	Max DC/Peak AC Resist.	Watts	50	50	200	200
Life Expectancy-Typical <sup>1</sup>	Signal Level 1.0V, 1mA	x 10 <sup>6</sup> Ops.	100	100	100	100
Static Contact Resistance (max. init.)	50mV, 10mA	Ω	0.080	0.080	0.200	0.200
RELAY SPECIFICATIONS						
Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>10</sup>
Capacitance - Typical Across Open Contacts		pF	1.5	1.5	1.5	1.5
Dielectric Strength	Between Contacts	VDC/peak AC	10,000	10,000	7500	7500
(minimum)	Contacts to Coil	VDC/peak AC	10,000	10,000	10,000	10,000
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	3.0	3.0	3.0	3.0
Release Time - Typical	Zener-Diode Suppression	msec.	3.0	3.0	3.0	3.0

Top View: Grid = .1"x.1" (2.54mm x 2.54mm)



5501, 5503



5502, 5504

## Notes:

<sup>1</sup>Consult factory for life expectancy at other switching loads.

<sup>2</sup>This relay contains a bias magnet. Correct coil polarity must be observed. Models 5502 and 5504 susceptible to magnetic interaction due to bias internal magnet.

### **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