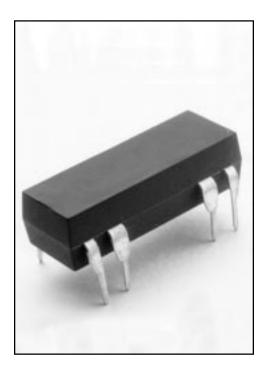
# 8L00 Series/Spartan DIP Reed Relays





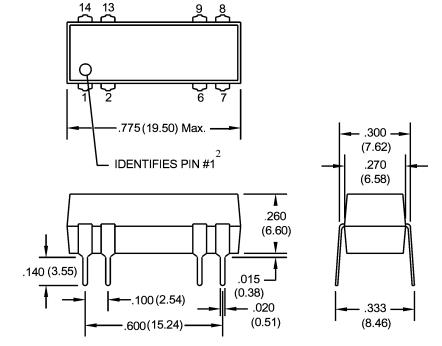
#### ECONOMY DIP REED RELAYS

The Coto 8L00 Spartan Series relays combine Coto quality and economy in the industry standard 14 pin molded DIP package. This series will cross to all competitive DIP packages and is ideal for telecom, security, and other general purpose applications.

#### **8L00 Series Features**

- Drop-in low cost replacement for industry standard DIP packages.
- Available in Form 1A, 1C, 2A and 1B packages and 5, 12, and 24 V coil designs.
- Molded thermoset body on integral lead frame design.
- Hermetically Sealed Contacts.
- Optional Electrostatic Shield and Coil Suppression Diode.

Dimensions in Inches (Millimeters)



Ordering Information				
Part Number <u>8LXX-XX</u> -				
Model Number	Diode Option			
8L01 8L41	0=No Diode 1=Diode			
Coil Voltage	Shield Option <sup>4</sup>			
05=5 volts	0=No Shield			
12=12 volts	1 = Electrostatic Shield			

Ordering Information					
Part Number <u>8LXX-)</u>	<u>x-xx</u>				
Model Number	Diode Option <sup>3</sup>				
8L02 8L21	0=No Diode 1=Diode				
Coil Voltage	Shield Option <sup>4</sup>				
05=5 volts	0=No Shield				
12=12 volts	1 = Electrostatic Shield				

## 8L00 Series/Spartan DIP Reed Relays

Model Number			<b>8L01</b> <sup>2,3,4</sup>	<b>8L02</b> <sup>2,3,4</sup>	<b>8L21</b> <sup>2,3,4</sup>	<b>8L41</b> <sup>2,3,4</sup>
Parameters	Test Conditions	Units	1 Form A	2 Form A	1 Form B	1 Form C
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 32	6.5 15 32	6.5 15 32	6.5 15 32
Coil Resistance	+/- 10%, 25° C	Ω	500 500 2150	200 500 2000	200 500 2000	200 500 2000
Operate Voltage	Must Operate by	VDC - Max.	3.8 9.6 19.2	3.8 9.6 19.2	3.8 9.6 19.2	3.8 9.6 19.2
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	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	1.0	1.0	1.0	0.5
Contact Rating	Max DC/Peak AC Resist.	Watts	10	10	10	3
Life Expectancy-Typical <sup>1</sup>	Signal Level 1.0V,10mA	x 10 <sup>6</sup> 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	N/A	N/A	N/A	N/A
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>9</sup>	10 <sup>9</sup>
Dielectric Strength	Between Contacts	VDC/peak AC	250	250	250	250
(minimum)	Contacts to Shield	VDC/peak AC	1500	1500	1500	1500
	Contacts/Shield to Coil	VDC/peak AC	1500	1500	1500	1500
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	0.5	0.5	0.5	1.0
Release Time - Typical	No Suppression	msec.	0.5	0.5	0.5	1.0
	Diode Suppression	msec.	1.0	1.0	1.0	1.5
Dot stamp	ed on top of relay refers to p	Top View: bin #1 location				

stamped on top of relay refers to pin #1 location Grid = .1"x.1" (2.54mm x 2.54mm)

### **Environmental Ratings**

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

### <sup>2</sup>Molded Depression on top of relay refers to pin #1 location.

switching loads.

Notes:

<sup>3</sup> Optional coil suppression diode across pins 2(+) and 6(-).

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

<sup>4</sup>Optional ES shield is tied to pins 9 and 13