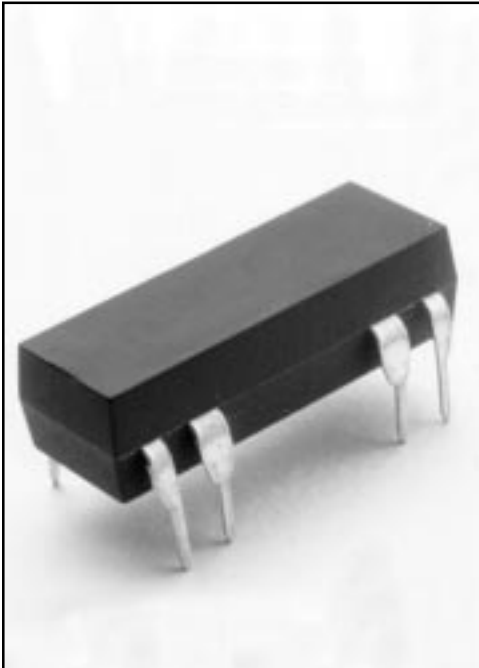


8L00 Series/Spartan DIP Reed Relays



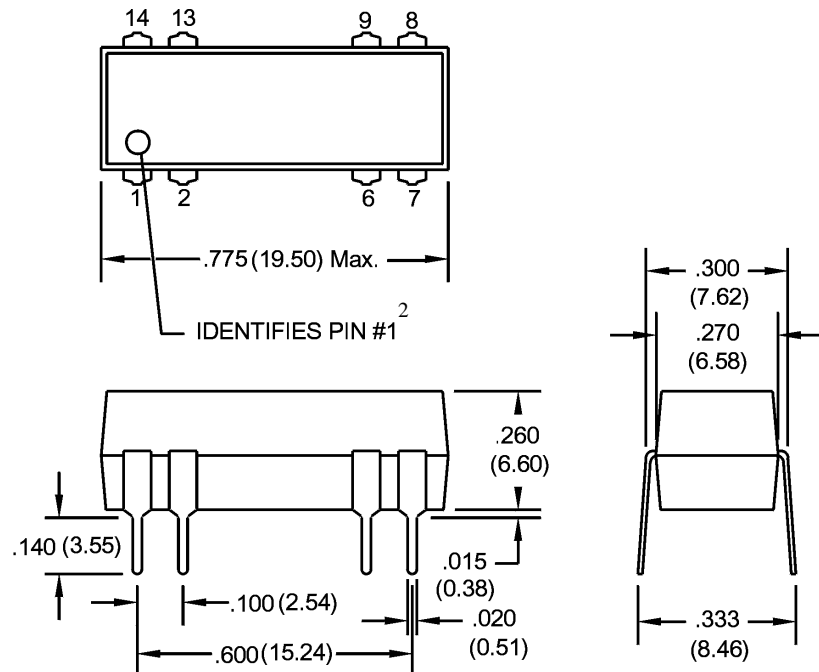
ECONOMY DIP REED RELAYS

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 | 8LXX-XX-XX1 | Diode Option ³ |
|--------------|-------------|----------------------------|
| Model Number | | 0=No Diode 1=Diode |
| Coil Voltage | | Shield Option ⁴ |
| 05=5 volts | | 0=No Shield |
| 12=12 volts | | 1=Electrostatic Shield |

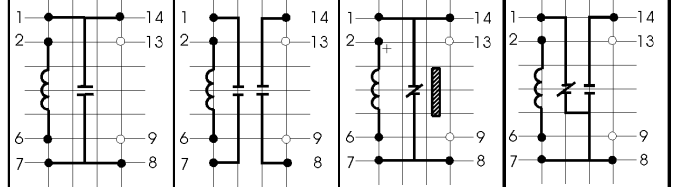
Ordering Information

| Part Number | 8LXX-XX-XX | Diode Option ³ |
|--------------|------------|----------------------------|
| Model Number | | 0=No Diode 1=Diode |
| Coil Voltage | | Shield Option ⁴ |
| 05=5 volts | | 0=No Shield |
| 12=12 volts | | 1=Electrostatic Shield |

8L00 Series/Spartan DIP Reed Relays

| Model Number | | | 8L01 ^{2,3,4} | | | 8L02 ^{2,3,4} | | | 8L21 ^{2,3,4} | | | 8L41 ^{2,3,4} | | |
|---|---|------------------------|-----------------------|-----|------|-----------------------|-----|------|-----------------------|-----|------|-----------------------|-----|------|
| 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 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 | 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 ¹⁰ | | | 10 ¹⁰ | | | 10 ⁹ | | | 10 ⁹ | | |
| Dielectric Strength (minimum) | Between Contacts | VDC/peak AC | 250 | | | 250 | | | 250 | | | 250 | | |
| | 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 | | |

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 Molded Depression on top of relay refers to pin #1 location.
- ³ Optional coil suppression diode across pins 2(+) and 6(-).
- ⁴ Optional ES shield is tied to pins 9 and 13

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