

# 8L SERIES/SPARTAN DIP REED RELAYS



## 8L Series Economy DIP Reed Relays

The Coto 8L 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.

## 8L Series Features

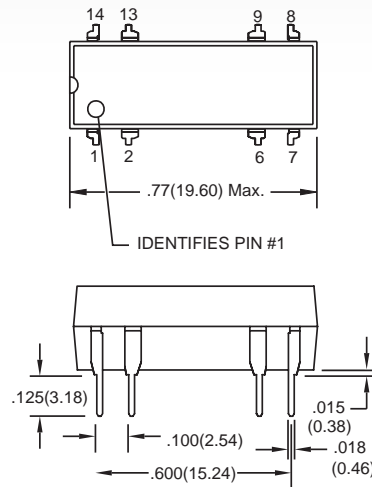
- ▶ Drop-in low cost replacement for industry standard DIP packages
- ▶ Contact forms; 1A, 2A and 1C available
- ▶ Available coils in 5V, 12V and 24V
- ▶ Molded thermoset body on integral lead frame design
- ▶ Hermetically Sealed Contacts
- ▶ Optional Electrostatic Shield and Coil Suppression Diode
- ▶ UL File #E67117 - Contact factory for details
- ▶ RoHS compliant

## DIMENSIONS

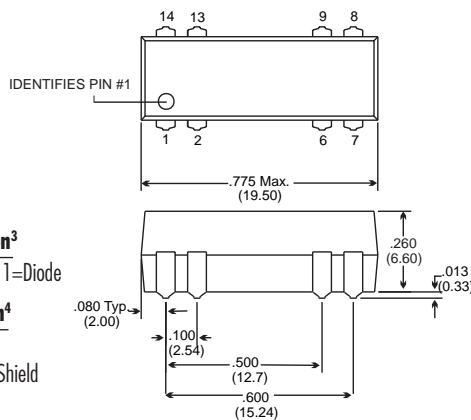
*in Inches (Millimeters)*

Model 8L01, 8L02 & 8L41

Alternate Package



Model 8L61



## Ordering Information

|                                  |  |
|----------------------------------|--|
| <b>Part Number</b>               | <b>8LXX-XX-XX1</b>                       |
| <b>Model Number</b>              | 8L01 8L41 8L61                           |
| <b>Coil Voltage</b>              | 05=5 volts<br>12=12 volts<br>24=24 volts |
| <b>Diode Option<sup>3</sup></b>  | 0=No Diode T=Diode                       |
| <b>Shield Option<sup>4</sup></b> | 0=No Shield<br>1=Electrostatic Shield    |

## Ordering Information

|                                  |  |
|----------------------------------|--|
| <b>Part Number</b>               | <b>8LXX-XX-XX</b>                        |
| <b>Model Number</b>              | 8L02                                     |
| <b>Coil Voltage</b>              | 05=5 volts<br>12=12 volts<br>24=24 volts |
| <b>Diode Option<sup>3</sup></b>  | 0=No Diode T=Diode                       |
| <b>Shield Option<sup>4</sup></b> | 0=No Shield<br>1=Electrostatic Shield    |

| MODEL NUMBER                               |   |                        | 8L01 <sup>2,3,4</sup> |     |      | 8L02 <sup>2,3,4</sup> |     |      | 8L41 <sup>2,3,4</sup> |     |      | 8L61 <sup>2,3,4,5</sup> |     |
|--|---|------------------------|-----------------------|-----|------|-----------------------|-----|------|-----------------------|-----|------|-------------------------|-----|
| Parameters                                 | Test Conditions                                 | Units                  | 1 Form A              |     |      | 2 Form A              |     |      | 1 Form C              |     |      | 1 Form C                |     |
| <b>COIL SPECS.</b>                         |   |                        |                       |     |      |                       |     |      |                       |     |      |                         |     |
| Nom. Coil Voltage                          |   | VDC                    | 5                     | 12  | 24   | 5                     | 12  | 24   | 5                     | 12  | 24   | 5                       | 12  |
| Max. Coil Voltage                          |   | VDC                    | 6.5                   | 15  | 32   | 6.5                   | 15  | 32   | 6.5                   | 15  | 32   | 6.5                     | 15  |
| Coil Resistance                            | +/- 10%, 25° C                                  | Ω                      | 500                   | 500 | 2150 | 200                   | 500 | 2000 | 200                   | 500 | 2000 | 200                     | 500 |
| 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 |
| 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 |
| <b>CONTACT RATINGS</b>                     |   |                        |                       |     |      |                       |     |      |                       |     |      |                         |     |
| Switching Voltage                          | Max DC/Peak AC Resist.                          | Volts                  | 200                   |     |      | 200                   |     |      | 100                   |     |      | 100                     |     |
| Switching Current                          | Max DC/Peak AC Resist.                          | Amps                   | 0.5                   |     |      | 0.5                   |     |      | 0.25                  |     |      | 0.25                    |     |
| Carry Current                              | Max DC/Peak AC Resist.                          | Amps                   | 1.0                   |     |      | 1.0                   |     |      | 0.5                   |     |      | 0.5                     |     |
| Contact Rating                             | Max DC/Peak AC Resist.                          | Watts                  | 10                    |     |      | 10                    |     |      | 3                     |     |      | 3                       |     |
| Life Expectancy-Typical <sup>1</sup>       | Signal Level 1.0V, 10mA                         | x 10 <sup>6</sup> Ops. | 500                   |     |      | 500                   |     |      | 100                   |     |      | 100                     |     |
| Static Contact Resistance (max. init.)     | 50mV, 10mA                                      | Ω                      | 0.150                 |     |      | 0.150                 |     |      | 0.200                 |     |      | 0.200                   |     |
| Dynamic Contact Resistance (max. init.)    | 50mV, 50mA at 100 Hz, 1.5 msec                  | Ω                      | N/A                   |     |      | N/A                   |     |      | N/A                   |     |      | 0.25                    |     |
| <b>RELAY SPECIFICATIONS</b>                |   |                        |                       |     |      |                       |     |      |                       |     |      |                         |     |
| 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>         |     |
| Capacitance - Typical Across Open Contacts | No Shield                                       | pF                     | 0.5                   |     |      | 0.5                   |     |      | 1.5                   |     |      | 1.5                     |     |
|  | Shield Floating                                 | pF                     | 1.0                   |     |      | 0.5                   |     |      | 1.5                   |     |      | 1.5                     |     |
|  | Shield Guarding                                 | pF                     | 0.5                   |     |      | 0.2                   |     |      | 1.0                   |     |      | 1.0                     |     |
| Open Contact to Coil                       | No Shield                                       | pF                     | 1.5                   |     |      | 1.5                   |     |      | 1.5                   |     |      | 1.5                     |     |
|  | Shield Floating                                 | pF                     | 2.0                   |     |      | 2.0                   |     |      | 2.0                   |     |      | 2.0                     |     |
|  | Shield Guarding                                 | pF                     | 0.5                   |     |      | 0.5                   |     |      | 0.5                   |     |      | 0.5                     |     |
| Contact to Shield                          | No Shield                                       | pF                     | 2.0                   |     |      | 1.5                   |     |      | 2.0                   |     |      | 2.0                     |     |
|  | Shield Floating                                 |                        | 2.0                   |     |      | 1.5                   |     |      | 2.0                   |     |      | 2.0                     |     |
|  | Shield Guarding                                 |                        | 2.0                   |     |      | 1.5                   |     |      | 2.0                   |     |      | 2.0                     |     |
| Dielectric Strength (minimum)              | Between Contacts                                | VDC/peak AC            | 250                   |     |      | 250                   |     |      | 200                   |     |      | 200                     |     |
|  | 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                   |     |      | 1.0                   |     |      | 1.0                     |     |
| Release Time - Typical                     | No Suppression                                  | msec.                  | 0.5                   |     |      | 0.5                   |     |      | 1.0                   |     |      | 1.0                     |     |

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



#### Notes:

- <sup>1</sup> Consult factory for life expectancy at other switching loads.
- <sup>2</sup> Molded depression on top of relay refers to pin #1 location.
- <sup>3</sup> Optional coil suppression diode across pins 2(+) and 6(-).
- <sup>4</sup> Optional ES Shield is tied to pin 9.
- <sup>5</sup> Surface mount processing temperature: 260°C max for 1 minute dwell time. Temperature measured on lead where lead exits molded package.

#### 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



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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