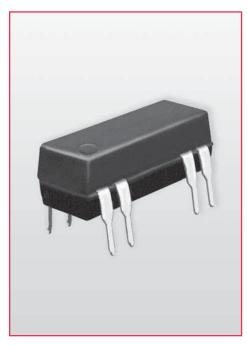
8L Series/Spartan DIP Reed Relays

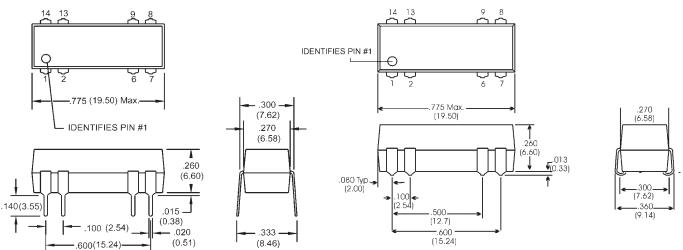


Economy DIP Reed Relays

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

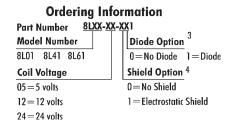
- Drop-in low cost replacement for industry standard DIP packages
- Contact forms; 1A, 2A, 1B and 1C available
- ♦ Available coils in 5V, 12V and 24V
- Molded thermoset body on integral lead frame design
- Hermetically Sealed Contacts
- Optional Electrostatic Shield and Coil Suppression Diode
- UL File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



(For Model #'s 8L01, 8L02, 8L21 & 8L41)

(For Model #8L61)

Dimensions in Inches (Millimeters)





8L Series/Spartan DIP Reed Relays

Model Number			8L01 ^{2,3,4}	8L02 ^{2,3,4}	8L21 ^{2,3,4}	8L41 ^{2,3,4}	8L61 ^{2,3,4,5}
Parameters	Test Conditions	Units	1 Form A	2 Form A	1 Form B	1 Form C	1 Form C
COIL SPECS.							SMD
Nom. Coil Voltage Max. Coil Voltage Coil Resistance Operate Voltage Release Voltage	+/- 10%, 25° C Must Operate by Must Release by	VDC VDC Ω VDC - Max. VDC - Min.	5 12 24 6.5 15 32 500 500 2150 3.8 9.6 19.2 0.5 1.0 2.0	5 12 24 6.5 15 32 200 500 2000 3.8 9.6 19.2 0.5 1.0 2.0	5 12 24 6.5 15 32 200 500 2000 3.8 9.6 19.2 0.5 1.0 2.0	5 12 24 6.5 15 32 200 500 2000 3.8 9.6 19.2 0.5 1.0 2.0	5 12 6.5 15 200 500 3.8 9.6 0.5 1.0
CONTACT RATINGS							
Switching Voltage Switching Current Carry Current Contact Rating Life Expectancy-Typical Static Contact Resistance (max. init.)	Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Max DC/Peak AC Resist. Signal Level 1.0V,10mA 50mV, 10mA	Volts Amps Amps Watts $x 10^6 ext{ Ops.}$	200 0.5 1.0 10 500 0.150	200 0.5 1.0 10 500 0.150	200 0.5 1.0 10 500 0.150	100 0.25 0.5 3 100 0.200	100 0.25 0.5 3 100 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	0.250
RELAY SPECIFICATIONS Insulation Resistance (minimum)	Between all Isolated Pins at 100V, 25°C, 40% RH	Ω	10 ¹⁰	10^{10}	10 ⁹	10 ⁹	10 ⁹
Capacitance - Typical Across Open Contacts	No Shield Shield Floating Shield Guarding	pF pF pF	0.5 1.0 0.5	0.5 0.5 0.2	0.5 0.5 0.2	1.5 1.5 1.0	1.5 1.5 1.0
Open Contact to Coil	No Shield Shield Floating Shield Guarding	pF pF pF	1.5 2.0 0.5	1.5 2.0 0.5	2.5 2.0 1.5	1.5 2.0 0.5	1.5 2.0 0.5
Contact to Shield	Contacts Open, Shield Floating	pF	2.0	1.5	2.0	2.0	2.0
Dielectric Strength (minimum)	Between Contacts Contacts to Shield Contacts/Shield to Coil	VDC/peak AC VDC/peak AC VDC/peak AC	250 1500 1500	250 1500 1500	250 1500 1500	200 1500 1500	200 1500 1500
Operate Time - including bounce - Typical	At Nominal Coil Voltage, 30 Hz Square Wave	msec.	0.5	0.5	0.5	1.0	1.0
Release Time - Typical	Diode Suppression ⁶ No Suppression	msec.	1.0 0.5	1.0 0.5	1.0 0.5	1.5 1.0	1.5 1.0
Top View: Dot stamped on top of relay refers to pin #1 location Grid = .1"x.1" (2.54mm x 2.54mm)			14 2 13	1 14 0 13	14 2 1 13	1 14 2 13	1 - 12 - 13 - 13 - 13 - 13 - 13 - 13 - 1

Notes:

- ¹Consult factory for life expectancy at other switching loads.
- ²Molded Depression on top of relay refers to pin #1 location.
- 3 Optional coil suppression diode across pins 2(+) and 6(-).
- ⁴Optional ES Shield is tied to pin 9.
- ⁵ Surface mount processing temperature: 260°C max for 1 minute dwell time. Temperature measured on leads where lead exits molded package.
- ⁶ Consists of 56V Zener diode and 1N4148 diode in series, connected in parallel with coil.

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