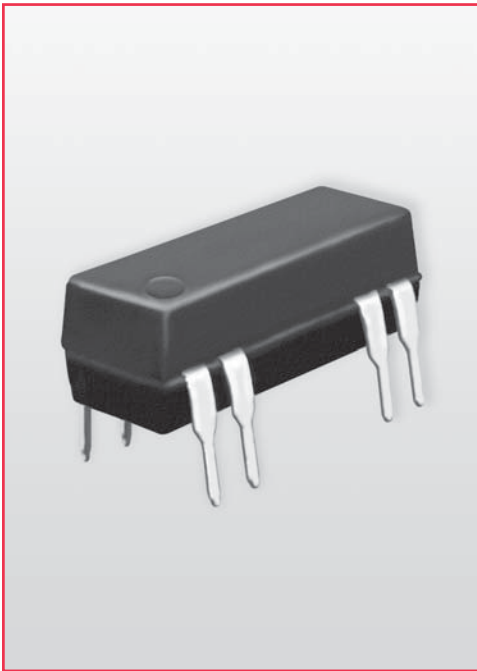


8L Series/Spartan DIP Reed Relays

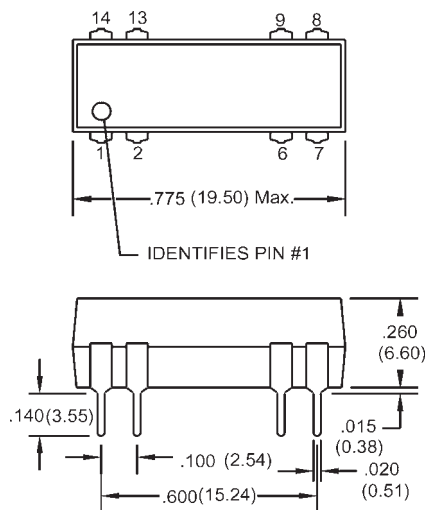


Economy DIP Reed Relays

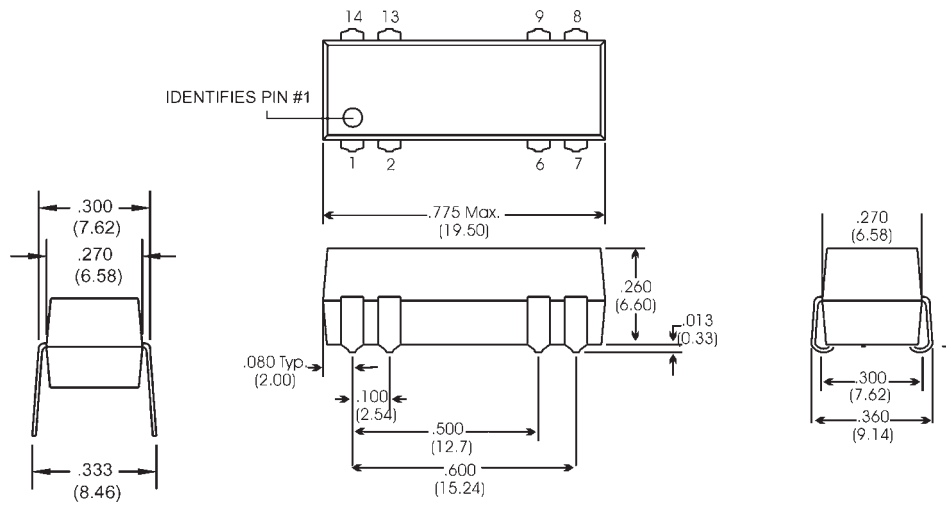
The Coto 8L Spartan Series relays combine Coto quality and economy in the industry standard 14 pin molded DIP package. This series will cross to all competitive DIP packages and is ideal for telecom, security, and other general purpose applications.

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)

Ordering Information

Part Number	8LXX-XX-XX1
Model Number	Diode Option ³
8L01 8L41 8L61	0 = No Diode 1 = Diode
Coil Voltage	Shield Option ⁴
05 = 5 volts	0 = No Shield
12 = 12 volts	1 = Electrostatic Shield
24 = 24 volts	

Ordering Information

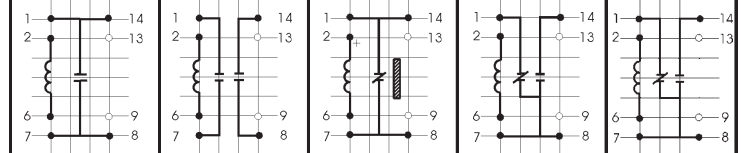
Part Number	8LXX-XX-XX
Model Number	Diode Option ³
8L02 8L21	0 = No Diode 1 = Diode
Coil Voltage	Shield Option ⁴
05 = 5 volts	0 = No Shield
12 = 12 volts	1 = Electrostatic Shield
24 = 24 volts	

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 SMD		
COIL SPECS.																		
Nom. Coil Voltage			VDC	5	12	24	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	32	6.5	15	
Coil Resistance		+/- 10%, 25° C	Ω	500	500	2150	200	500	2000	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	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	2.0	0.5	1.0	
CONTACT RATINGS																		
Switching Voltage		Max DC/Peak AC Resist.	Volts	200			200			200			100			100		
Switching Current		Max DC/Peak AC Resist.	Amps	0.5			0.5			0.5			0.25			0.25		
Carry Current		Max DC/Peak AC Resist.	Amps	1.0			1.0			1.0			0.5			0.5		
Contact Rating		Max DC/Peak AC Resist.	Watts	10			10			10			3			3		
Life Expectancy-Typical ¹		Signal Level 1.0V,10mA	x 10 ⁶ Ops.	500			500			500			100			100		
Static Contact Resistance (max. init.)		50mV, 10mA	Ω	0.150			0.150			0.150			0.200			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		No Shield	pF	0.5			0.5			0.5			1.5			1.5		
Across Open Contacts		Shield Floating	pF	1.0			0.5			0.5			1.5			1.5		
		Shield Guarding	pF	0.5			0.2			0.2			1.0			1.0		
Open Contact to Coil		No Shield	pF	1.5			1.5			2.5			1.5			1.5		
		Shield Floating	pF	2.0			2.0			2.0			2.0			2.0		
		Shield Guarding	pF	0.5			0.5			1.5			0.5			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	VDC/peak AC	250			250			250			200			200		
		Contacts to Shield	VDC/peak AC	1500			1500			1500			1500			1500		
		Contacts/Shield to Coil	VDC/peak AC	1500			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			1.0		
Release Time - Typical		Diode Suppression ⁶	msec.	1.0			1.0			1.0			1.5			1.5		
		No Suppression	msec.	0.5			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)																		

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 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