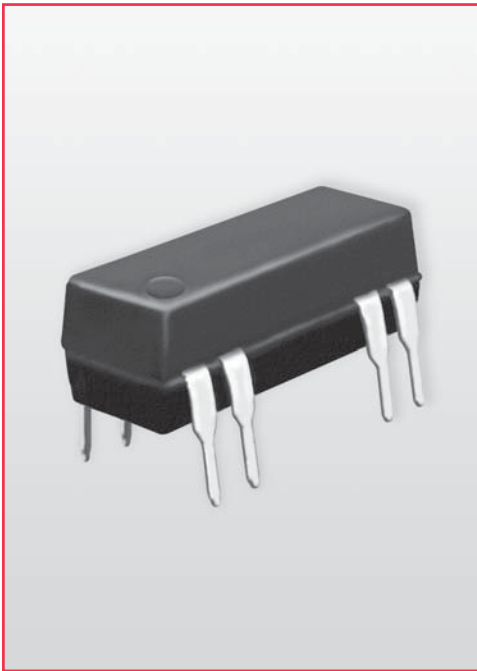


8L Series/Spartan DIP Reed Relays

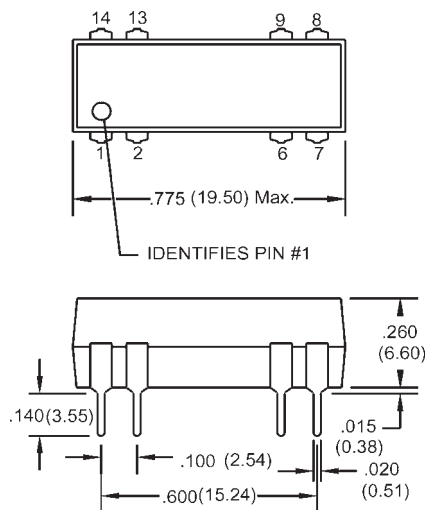


Economy DIP Reed Relays

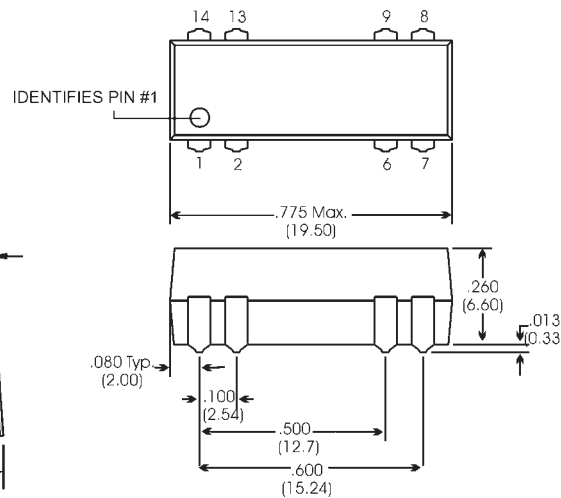
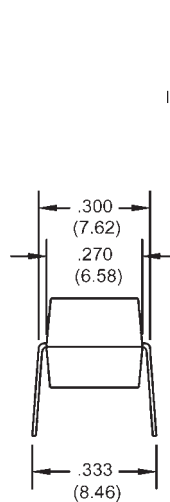
The Coto 8L Spartan Series relays combine Coto quality and economy in the industry standard 14 pin molded DIP package. This series will cross to all competitive DIP packages and is ideal for telecom, security, and other general purpose applications.

8L Series Features

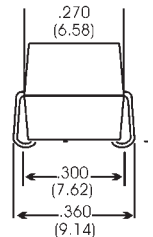
- ◆ Drop-in low cost replacement for industry standard DIP packages
- ◆ Contact forms; 1A, 2A, 1B and 1C available
- ◆ Available coils in 5V, 12V and 24V
- ◆ Molded thermoset body on integral lead frame design
- ◆ Hermetically Sealed Contacts
- ◆ Optional Electrostatic Shield and Coil Suppression Diode



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



(For Model # 8L61)



Dimensions in Inches (Millimeters)

Ordering Information

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

Ordering Information

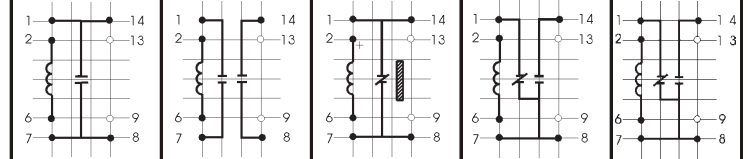
Part Number	8LXX-XX-XX	Diode Option ³
Model Number	8L02 8L21	0 = No Diode 1 = Diode
Coil Voltage	05 = 5 volts 12 = 12 volts 24 = 24 volts	Shield Option ⁴ 0 = No Shield 1 = Electrostatic Shield

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		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	x 10 ¹⁰			x 10 ¹⁰			x 10 ⁹			x 10 ⁹			x 10 ⁹			
Capacitance - Typical Across Open Contacts	No Shield	pF	0.5			0.5			0.5			1.5			1.5			
	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	No Suppression	msec.	0.5			0.5			0.5			1.0			0.5			
	Diode Suppression	msec.	1.0			1.0			1.0			1.5			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 pin 9.
- ⁵ Surface mount processing temperature: 438°F (226°C) max for 1 minute dwell time. Temperature measured on leads where lead exits molded package. Through-hole component processing temperature: 518°F (270°C) max; 10 seconds max.

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