Line Sensing Reed Relays with Magnetic Shield

CHARACTERISTICS

- Line Sense Relay
- Approved according to EN60950
- Magnetic shield
- UL approved under E 156887 (M)
- Small size
- Washable

DESCRIPTION

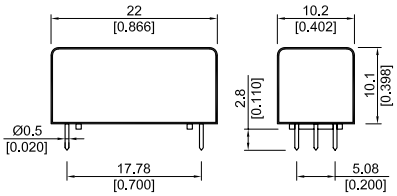
The NP-CL Reed Relays are used for line sensing in many modems, fax machines, PBX systems and other telecommunication systems. The 1 coil version is approved according to EN60950 and offers sufficient distance in air and creepage paths.

APPLICATIONS

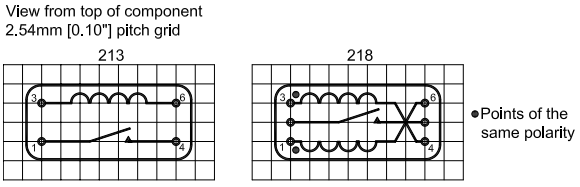
- Line systems in phones and faxes
- Telecommunications

DIMENSIONS

All dimensions in mm [inches]



PIN OUT



ORDER INFORMATION

Relay Series	Contact Form	Switch Model	Coil Resistance	Pin Out
NP-CL-	**1A**	**81 -**	**X -**	**XXx**
Options			9	213
			4 / 4	218

Part Number Example

NP-CL - 1A81 - 9 - 213

9 is the coil resistance
213 is the pin out

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RELAY DATA

All Data at 20° C	Switch Model --> Contact Form -->	Switch 81 Form A			
Contact Ratings	**Conditions**	**Min.**	**Typ.**	**Max.**	**Units**
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			5	W
Switching Voltage	DC or peak AC			90	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or peak AC			1.0	A
Static Contact Resistance	w/ 0.5 V & 10mA			200	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50mA , 1.5 ms after closure			200	mΩ
Insulation Resistance across Contacts	Across Contact Coil - Contact	10^{10} 10^{13}			Ω
Breakdown Voltage across Contact	Across Contact Coil - Contact	100 1000			VDC
Operation Time incl. Bounce	100 % Overdrive			0.5	ms
Release Time	with no coil suppression			0.1	ms
Capacitance	Across Contact Coil - Contact		0.4 2.5		pF
Life Expectance					
Switch Voltage 5V - 10 mA	DC <10 pF stray cap.		100		10^6 Cycles
For other load requirements, see test section on Page 152.					
Environmental Data					
Shock Resistance	1/2 sinus wave duration 11 ms			30	g
Vibration Resistance	From 10 - 2000 Hz			10	g
Ambient Temperature	10°C/ minute max. allowable	-20		70	°C
Stock Temperature	10°C/ minute max. allowable	-25		85	°C
Soldering Temperature	5 sec.			260	°C

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COIL DATA

Contact Form	Switch Model	Pin Out	Coil Resistance			Pull-in Current		Drop-out Current		Inductance at 1kHz at One Coil (*at both coils)		
All Data at 20 °C **			Ω			mA		mA		mH		
			Min.	Typ.	Max.	Min.	Max	Min.	Max.	Min.	Typ.	Max.
1A	81	213	8.1	9	9.9	5.1	15	5	14	2.72	3.4	4.08
		218***	3.6 3.6	4/4	4.4 4.4	5.1	15	5	14	0.64 2.56*	0.8 3.2*	0.96 3.84*

* The pull-in / drojp-out voltages and coil resistance will change at the rate 0,4% / °C
***Values presented are for coils in Series aiding.