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ELECTRONICS

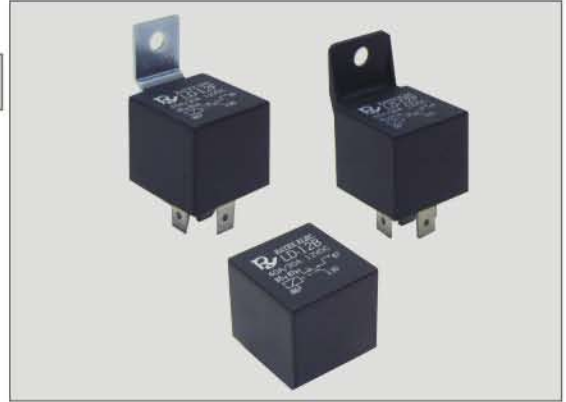
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Jameco Part Number 1810179

## FEATURES

- 40A switching use relay at ambient temperature of 80K
- Solder lug (quick connect) and PCB terminals are available for customer's selection.
- Contact form: 1 form C, 1 Form B, 1 Form A, and 2 Form A
- Using at automotives, direct connection with cell motors, transmission, and anti-locking braking system.



## ORDERING INFORMATION

LD — 12 F

1      2                      3      4      5

**1. Type**

**2. Contact Arrangement**

Nil : 1 Form C  
 1A : 1 Form A  
 1B : 1 Form B  
 2A : 1PDM

**3. Coil Nominal Voltage**

**4. Cover Type**

F : Cover for Steel Bracket  
 P : Cover for Plastic Bracket  
 B : Plastic Cover

**5. Terminal Type**

Nil : Standard Type  
 P : PCB Terminal

**5. Special Mark**

Nil : Standard Type.

R1 : Coil parallel with 1/2W resistor 680 for 12VDC, 2700 for 24VDC.

R2 : Coil parallel with 1/2W resistor 820 for 12VDC, 3200 for 24VDC.

D1 : Coil parallel with diode 1N4007 the Positive pole "+" on # 85 terminal.

D2 : Coil parallel with diode 1N4007 the Negative pole "-" on # 85 terminal.

D3 : Coil parallel with diode 1N4004 the Positive pole "+" on # 85 terminal.

D4 : Coil parallel with diode 1N4004 the Negative pole "-" on # 85 terminal.

## CONTACT RATING

1PDT	Resistive (Cos.θ = 1)	DC 12V	40A/30A
1PST-DM	Resistive (Cos.θ = 1)	DC 12V	2 x 20A

## COIL DATA(1.8W, at 25°C )

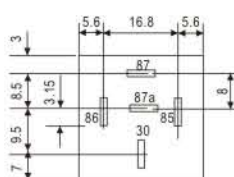
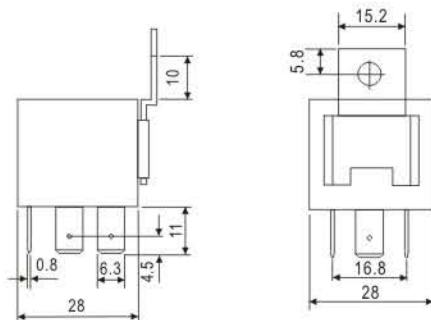
Coil Nominal Voltage (VDC)	Resistance Tol. 10% (Ohms)	Nominal Current (mA)	Maximum Pick Up Voltage (V)	Minimum Drop Out Voltage (V)
12	80	150	7.8	1.2
24	320	75	17.0	2.4

# DIMENSIONS(mm)

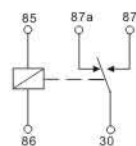
## P.C.B LAYOUT (BOTTOM VIEW)

## WIRING DIAGRAM (BOTTOM VIEW)

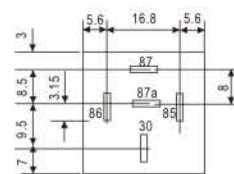
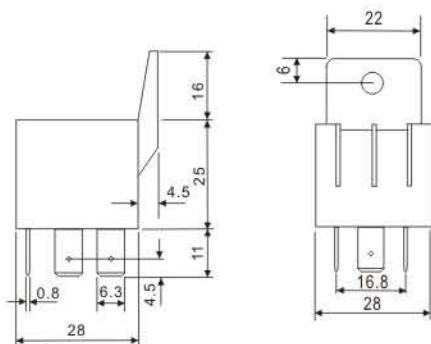
F TYPE



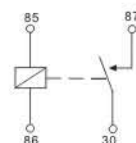
1C



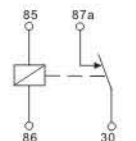
P TYPE



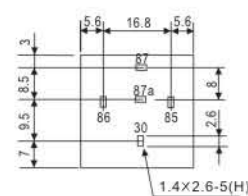
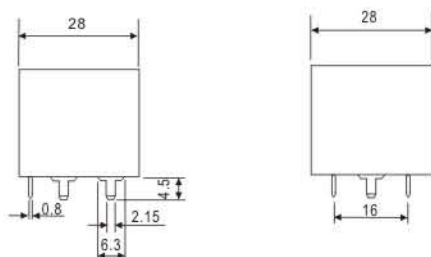
1A



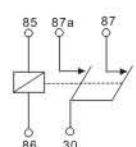
1B



B TYPE



2A



## GENERAL DATA

Insulation Resistance	50 MΩ Min. (DC 500V)
Dielectric Strength	500 VAC, 50/60Hz between contact.
	1,000 VAC, 50/60Hz between all elements.
Contact Material	Silver- Cadmium Oxide as standard.
Contact Resistance	100 milliohms max. ( initial value )
Shock Resistance	Malfunction: 10G(11ms) ; Destructive: 100G(6ms)
Vibration Resistance	Malfunction: 10 to 55 Hz. at Double Amplitude of 1.5 mm
	Destructive: 10 to 55 Hz. at Double Amplitude of 1.5 mm
Operation Time	10 ms max.
Release Time	10 ms max.
Temperature Range	- 40°C ~ + 85°C
Expected Life	With operation rate 30/min.
	Mechanical - 1,000,000 operations min.
	Electrical - 100,000 operations min. at rated load.
Weight	38 grams