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ELECTRONICS

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Jameco Part Number 171442

## FEATURES

- 40A switching use relay at ambient temperature of 80°C
- 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 680Ω for 12VDC, 2700Ω for 24VDC.
- R2 : Coil parallel with 1/2W resistor 820Ω for 12VDC, 3200Ω 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.

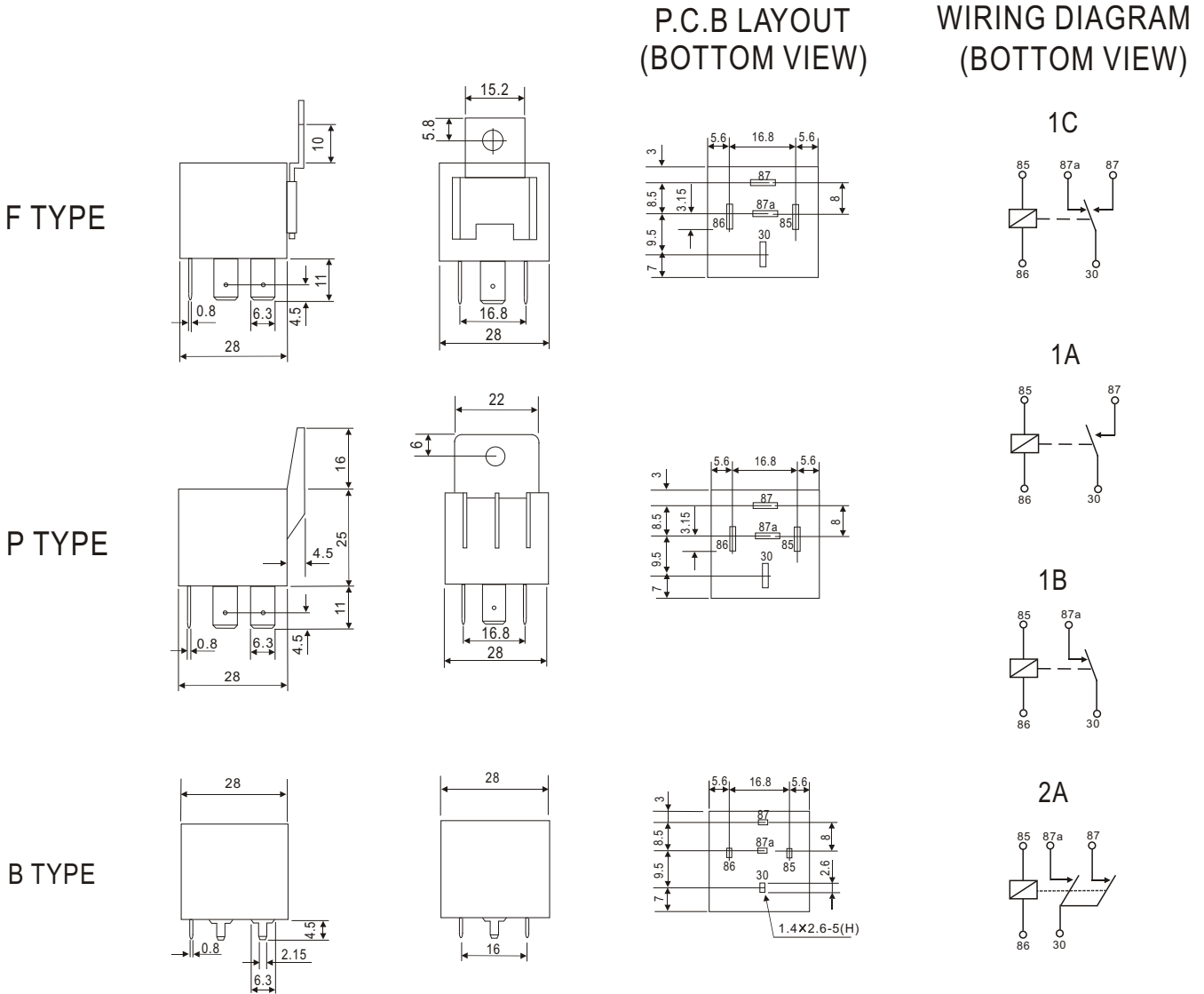
## CONTACT RATING

|         |                      |        |         |
|---------|----------------------|--------|---------|
| 1PDT    | Resistive (Cos. = 1) | DC 12V | 40A/30A |
| 1PST-DM | Resistive (Cos. = 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)



## GENERAL DATA

|                       |   |
|-----------------------|---|
| Insulation Resistance | 50 M 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.<br>Electrical - 100,000 operations min. at rated load. |
| Weight                | 38 grams  |