

## Automotive Twin PCB Power Relay

## PC617



### FEATURES

- 20 Amp continuous current capacity
- Up to 60 amp switching capacity
- Six different contact forms
- Designed for high inrush applications
- Four different contact materials available
- UL Class F insulation available
- Dust cover or sealed version available

### CONTACT RATINGS

| Form                    |       | 1 Form A (SPST NO)                  | 1 Form B (SPST NC) | 1 Form C (DPDT) |         | 1 Form U (SPST-NO-DM) | 1 Form V (SPST-NC-DB) | 1 Form W (SPDT-DB-DM) |            |
|-------------------------|-------|-------------------------------------|--------------------|-----------------|---------|-----------------------|-----------------------|-----------------------|------------|
|                         |       |                                     |                    | NO              | NC      |                       |                       | NO                    | NC         |
| Max Switching Current   | Make  | 60 Amps                             | 12 Amps            | 60 Amps         | 12 Amps | 2 X 40 Amps           | 2 X 8 Amps            | 2 X 30 Amps           | 2 X 5 Amps |
|                         | Motor | 20 Amps                             | 10 Amps            | 20 Amps         | 10 Amps | 2 X 20 Amps           | 2 X 7 Amps            | 2 X 15 Amps           | 2 X 5 Amps |
| Max. Continuous Current |       | 20 Amps                             | 10 Amps            | 20 Amps         | 10 Amps | 2 X 10 Amps           | 2 X 7 Amps            | 2 X 7 Amps            | 2 X 5 Amps |
| Minimum Load            |       | .05 Amps @ 5 VDC                    |                    |                 |         |                       |                       |                       |            |
| Max. Switching Voltage  |       | See curve page 2, current dependant |                    |                 |         |                       |                       |                       |            |

### CONTACT DATA

|                            |   |                                |
|----------------------------|---|--------------------------------|
| Material                   | AgNiO 15 (Silver Nickel Oxide 15%), AgSnInO (Silver Tin Oxide Indium Oxide) |                                |
| Initial Contact Resistance | 100 milliohms max @ 0.1A, 6VDC  |                                |
| Service Life               | Mechanical  | 1 X 10 <sup>7</sup> Operations |
|                            | Electrical  | 1 X 10 <sup>5</sup> Operations |

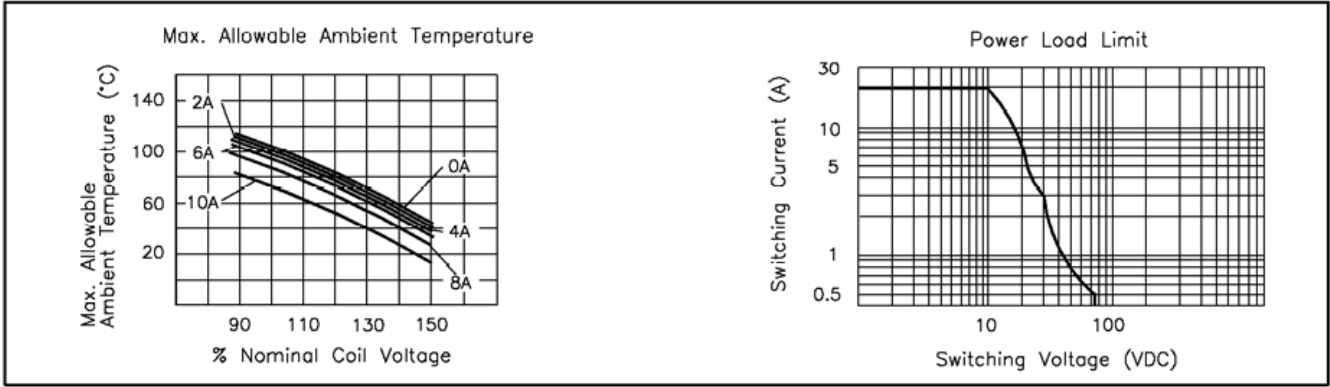
### CHARACTERISTICS

|                           |  |
|---------------------------|--|
| Operate Time              | 10 ms. typical                                     |
| Release Time              | 5 ms. typical                                      |
| Insulation Resistance     | 100 megohms min, at 500VDC, 50%RH                  |
| Dielectric Strength       | 1500 Vrms, 1 min. between coil and contacts        |
| Shock Resistance          | 10 g, 11ms, functional; 100 g, destructive         |
| Vibration Resistance      | DA 1.5 mm, 20 - 200 Hz functional                  |
| Drop Resistance           | 1 Meter height drop on concrete in final enclosure |
| Power Consumption         | 2 x 1.1 W approx.                                  |
| Ambient Temperature Range | -40 to 85 degrees C operating, -40 to 125 storage  |
| Weight                    | 20 grams approx.                                   |

### COIL DATA

| Coil Voltage | Resistance<br>ohms ± 10% | Must Operate Voltage Max.<br>(VDC) |      | Allowable<br>Voltage Max<br>(VDC) | Must Release Voltage Min.<br>(VDC) |            |
|--------------|--------------------------|------------------------------------|------|-----------------------------------|------------------------------------|------------|
|              |                          | A, B, C, U, V                      | W    |                                   | B, V                               | A, C, U, W |
| 6            | 36 X 2                   | 3.75                               | 4.5  | 8                                 | 0.35                               | 0.7        |
| 12           | 145 X 2                  | 7.50                               | 9.0  | 16                                | 0.70                               | 1.4        |
| 24           | 576 X 2                  | 15.0                               | 18.0 | 31                                | 1.40                               | 2.8        |

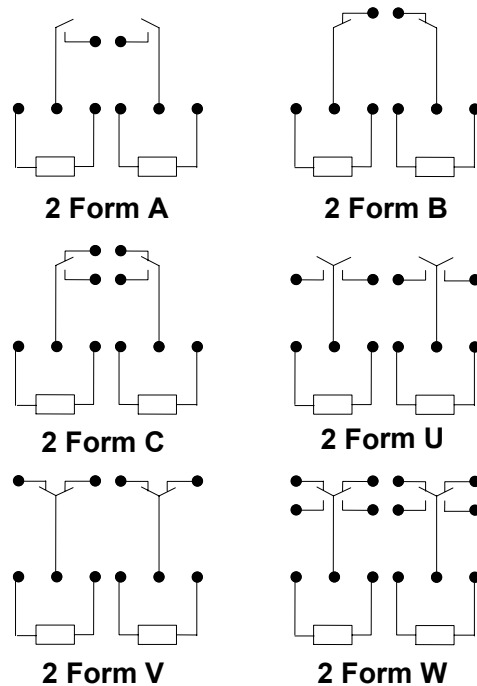
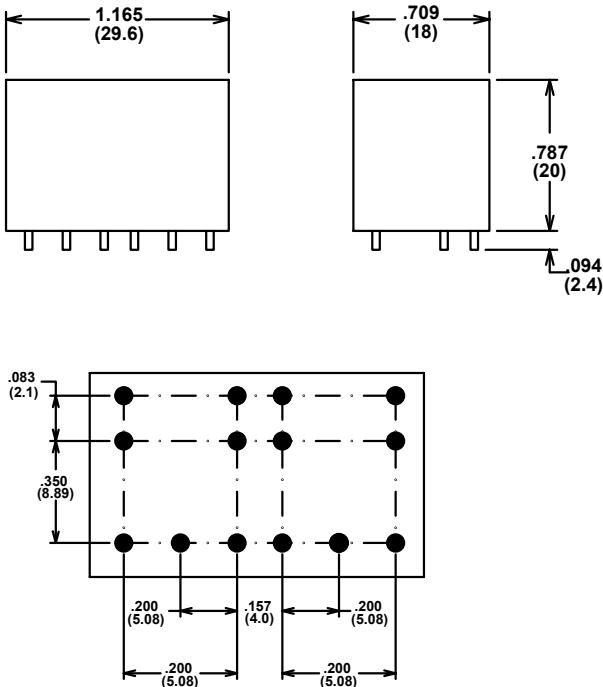
REFERENCE CURVES



ORDERING INFORMATION

|                  |   |     |     |   |   |
|------------------|---|-----|-----|---|---|
| Example:         | PC617                                     | -2C | -12 | S | T |
| Model            |   |     |     |   |   |
| Contact Form     | 2A, 2B, 2C, 2U, 2V or 2W                  |     |     |   |   |
| Coil Voltage     |   |     |     |   |   |
| Enclosure        | Nil: Open Frame; S: Sealed; C: Dust Cover |     |     |   |   |
| Contact Material | Nil: AgSnO; C: AgCdO; T: AgSnInO          |     |     |   |   |

Dimensions in Inches (millimeters) drawings are 2 X scale



Notes:

Tolerances  $\pm$  .010 unless otherwise noted



3220 Commander Drive, Suite 102, Carrollton, Texas 75006

Sales: Call Toll Free (888) 997-3933 Fax (818) 342-5296 email: pickerwest@sbcglobal.net URL: pickercomponents.com