# Automotive Subminiature PCB Power Relay — PC517

## FEATURES

- 15 Amp continuous current capacity
- Up to 60 amp switching capacity
- Six different contact forms
- Four different contact materials available
- Designed for high inrush applications
- UL Class F insulation standard
- 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 | 1 Form V | 1 Form W (SPDT-DB-DM) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | NO | NC | (SPST-NO-DM) | (SPST-NC-DB) | 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 | | 15 Amps | 10 Amps | 15 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%), AgSnOInO (Silver Tin Oxide Indium Oxide) |
| Initial Contact Resistance | | 100 milliohms max @ 0.1A, 6VDC |
| Service Life | Mechanical | 1 X $10^7$ Operations |
| | Electrical | 2 X $10^5$ Operations |

## CHARACTERISTICS

| | |
|---|---|
| Operate Time | 3 ms. typical |
| Release Time | 1.5 ms. typical |
| Insulation Resistance | 100 megohms min, at 500VDC, 50%RH |
| Dielectric Strength | 500 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 | 1.1 W approx. |
| Ambient Temperature Range | -40 to 85 degrees C operating, -40 to 155 storage |
| Weight | Open: 8 grams; Enclosed: 12 grams approx. |

## COIL DATA

| Coil Voltage | Resistance ohms ± 10% | Must Operate Voltage Max. (VDC) | | Allowable Voltage Max (VDC) | Must Release Voltage Min. (VDC) | |
|---|---|---|---|---|---|---|
| | | A, B, C, U, V | W | | B, V | A, C, U, W |
| 6 | 28 | 3.75 | 4.5 | 8 | 0.35 | 0.7 |
| 12 | 130 | 7.50 | 9.0 | 16 | 0.70 | 1.4 |
| 24 | 520 | 15.0 | 18.0 | 31 | 1.40 | 2.8 |

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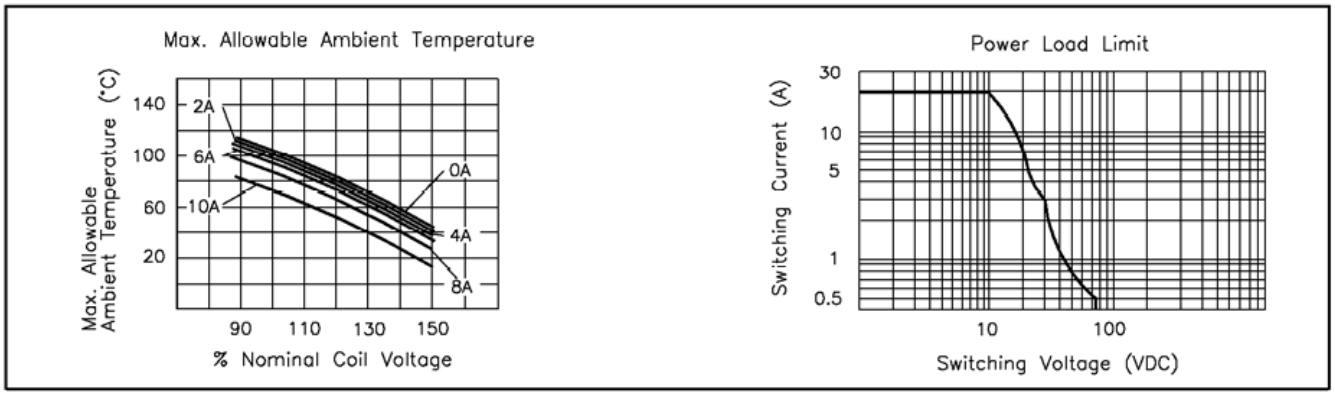
## REFERENCE CURVES




## ORDERING INFORMATION

| | Example: | PC517 | -1C | -12 | S | T |
|---|---|---|---|---|---|---|

Model

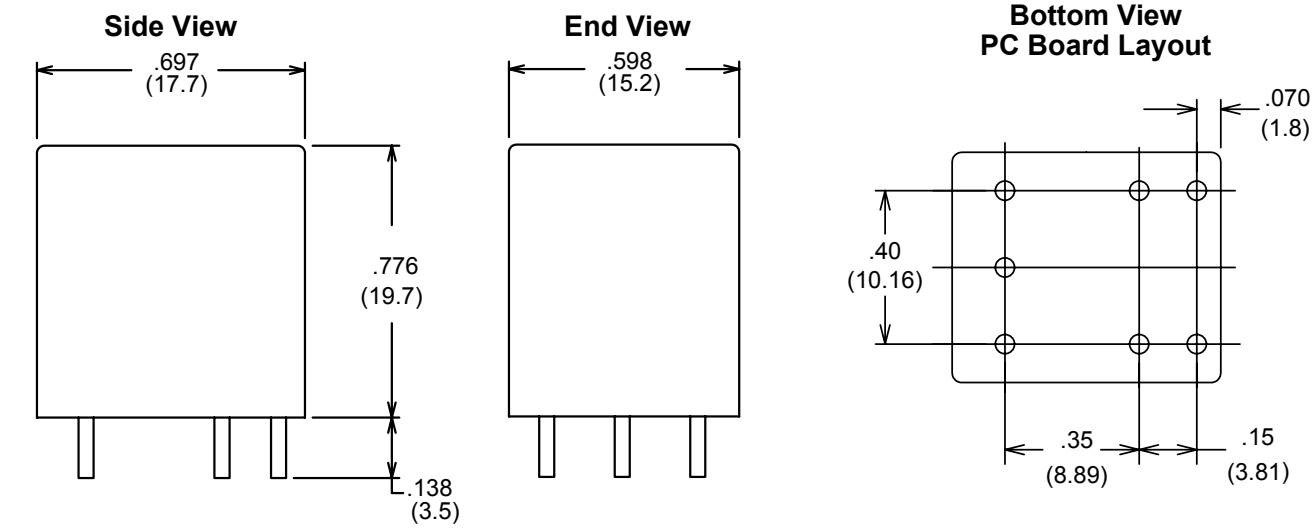
Contact Form
1A, 1B, 1C, 1U, 1V or 1W

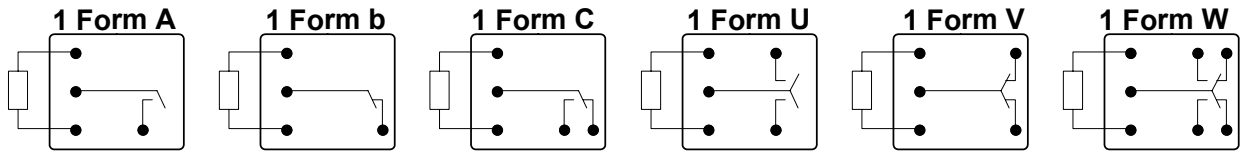
Coil Voltage

Enclosure
Nil: Open Frame; S: Sealed; C: Dust Cover

Contact Material
Nil: AgSnO; C: AgCdO; T: AgSnOInO

**Dimensions in Inches (millimeters) drawings are 2 X scale**




Notes:
Contact Form W shown
On other contact forms Unused Pins are Omitted
Maximum make current refers to inruch current of a lamp load
Tolerances ± .010 unless otherwise noted

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