

## Type PC610 Series



Tyco specification in polymer technology gives this small single turn potentiometer stability, reliability and long life. For use in industrial and consumer applications, this component offers durability and quality performance and is available with top or side mounting versions with alternative shafts.

The PC610 is an ideal component in toys, games, computer brightness and contrast and most suited to similar large volume applications where the completely automated manufacture allows attractive prices to be achieved. The PC610 is often used without a control knob with the splined tip protruding from the fascia.

The PC610 is available with or without centre detent.

### Key Features

- Stable High Resolution Element
- Space Saving Size (Only 9.5mm Wide)
- Offered in Linear and Non-Linear Laws
- Vertical or Horizontal Mounting
- Choice of Shaft Style
- PCB Standoffs
- Simple One Piece Style

### Characteristics - Electrical

|                            |                                    |
|----------------------------|------------------------------------|
| Resistance Range:          | 500 Ohms to 500K Ohms              |
| Resistance Values:         | 1,2 and 5 in each decade           |
| Resistance Laws available: | Linear and Non Linear              |
| Resistance Tolerance:      | ± 20%                              |
| End Resistance:            | 2% Nominal                         |
| Slider Current:            | 50mA                               |
| Power Rating, Watts:       | 0.05W                              |
| Maximum Working Voltage:   | 20Vdc or ac RMS, Max.              |
| Insulation Resistance:     | 100 M Ohms Min at 250 Vdc          |
| Rotational Noise (CRV):    | 20 Ohms or 3% whichever is greater |
| Temperature Coefficient:   | 5%                                 |

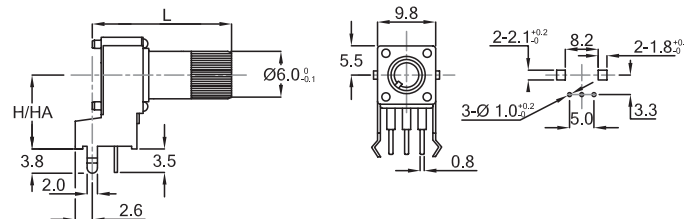
### Characteristics - Mechanical

|                        |                           |
|------------------------|---------------------------|
| End Stop:              | 20mNm                     |
| Rotational Torque:     | 1 - 15mNm                 |
| Mechanical Adjustment: | 1 Turn - 280° ±10°        |
| Soldering:             | 300°C (maximum 3 seconds) |
| Weight:                | 3 grams approximate.      |

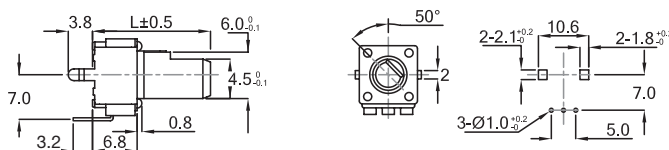
### Characteristics - Environmental

|                      |                                |
|----------------------|--------------------------------|
| Temperature Range:   | -20°C to 70°C                  |
| Temperature Storage: | 1000 Hrs at 70°C               |
| Bump Severity:       | 4000 Bumps; 20G                |
| Vibration Severity:  | 10 - 500Hz; 10G                |
| Rotational Life:     | 5,000 Operations minimum       |
| Load Life at 50°C:   | ΔR < +10% -15% after 500 hours |

### Dimensions PC610H



### PC610V



### How to Order PC610

| Common Part                                                                         | H                                                                                                                                             | 104                                                                                                                                                                               | B                                                          | M                                                                                                          | 20                                                                                                                                                              |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PC610 - No Detent<br>PC611 - With Detent<br>PC612 - Special Mounting Height (6.5mm) | Orientation<br>H - 10mm Mounting Height Shaft parallel to PCB<br>HA - 12.5mm Mounting Height Shaft parallel to PCB<br>V - Shaft at 90° to PCB | Resistance Value<br>The first two digits are significant figures of resistance value and the third denotes the number of zeros following.<br>e.g. 1K: 102<br>5K: 502<br>100K: 104 | Resistance Law<br>A - Linear<br>B - Log<br>C - Inverse Log | Shaft Style<br>F - Flatted<br>K - Knurled<br>M - Pointer<br>N - Plain<br>P - Phillips Slot<br>S - Serrated | Shaft Length<br>(S)20 - 20mm Serrated<br>(S)30 - 30mm Serrated<br>(S)35 - 35mm Serrated<br>(F)15 - 15mm Flatted<br>(P)15 - 15mm Slotted<br>(K)30 - 30mm Knurled |