Type 17P Series

## Key Features

■ Polymer thick film element
■ Switch versions available

- Dual gang version available
■ High reliability
- Small versatile size
- All plastic body
- Plastic spindle
- Flame retardant


## Applications

- Audio

■ Industrial controls

- Lighting
- Appliances


Specify the type 17P for applications where high insulation resistance and voltage proof are key requirements. The materials used in the all plastic body and spindle construction are UL approved making it a suitable component for domestic appliances and control systems where safety is of prime importance. This popular low cost potentiometer is suitable for industrial and professional applications. A range of approved switches can be added to the rear of the potentiometer, to produce rotary or push-push action mains switches.

## Characteristics - Electrical

| Resistance Range: | 1 K to 1 M (linear), 4 K 7 to 470 K <br> (non linear) |
| :--- | :--- |
| Resistance Value: | $1,2.2$ and 4.7 in each decade |
| Resistance Tolerance: | $\pm 20 \%$ (10\% by selection) |
| Rated Dissipation at 20 ${ }^{\circ} \mathrm{C}:$ | 0.25 W (linear), 0.125 W (non linear) |
| Limiting Element Voltage: | 350 V DC or AC (rms) |
| Electrical Rotation: | $267^{\circ}$ without switch, $232^{\circ}$ with switch |
| Terminal Resistance: | $5 \Omega$, maximum |
| Noise (ENR): | $2 \%$ maximum (linear), $3 \%$ maximum <br> (non linear) |
| Insulation Resistance: | $4 \mathrm{G} \Omega$, minimum |
| Voltage Proof: | 1 kV AC peak |

Characteristics - Environmental

| Limits of Resistance Change: | $15 \%$ (after 1000 hrs . endurance) |
| :--- | :--- |
| Temperature Characteristics <br> of Resistance: | $5 \%\left(20^{\circ} \mathrm{C}\right.$ to $\left.70^{\circ} \mathrm{C}\right)$ |
| Bump Severity: | $390 \mathrm{~m} / \mathrm{s}^{2}, 4000$ bumps |
| Vibration Severity: | $10-500 \mathrm{~Hz}, 0.75 \mathrm{~mm}$ or $98 \mathrm{M} / \mathrm{s}^{2}$ |
| Climatic Category: | $25 / 70 / 04$ |
| Mechanical Endurance: | 20000 operations (minimum) |

Characteristics - Mechanical

| Operating Torque: | 15 mNm maximum |
| :--- | :--- |
| Mechanical Rotation: | $300^{\circ}$ nominal |
| End Stop Torque: | 350 mNm maximum |

## Characteristics - Switch

|  | B \& D | A \& E | P |
| :--- | :---: | :---: | :---: |
| Switch Type: | 1 A | 4 A | 10 A |
| Current/Voltage Rating: | $1.0 \mathrm{~A}-24 \mathrm{~V} \mathrm{DC}$ | $10 \mathrm{~A}-12 \mathrm{~V} \mathrm{DC}$ | $10 \mathrm{~A}-250 \mathrm{~V} \mathrm{AC}$ |
|  | $0.3 \mathrm{~A}-250 \mathrm{~V} \mathrm{AC}$ | $4 \mathrm{~A}-250 \mathrm{~V} \mathrm{AC}$ |  |
| On/Off Torque: | 40 mNm maximum | 40 mNm maximum | Life $-25,000$ cycles minimum |
| Initial Contact Resistance: | $20 \mathrm{~m} \Omega$ | $20 \mathrm{~m} \Omega$ | Proof Voltage -3 kV minimum |
| Contact Gap: | 3 mm | 3 mm |  |

## Type 17P Series

## Dimensions

## Single Potentiometer




Single Switched Potentiometer

Dual Potentiometer


Push-Push Switch PCB Layout


Bush Mounting Panel Cutout

Rotary Switch PCB Layout



PCB Layout


Dual Potentiometer PCB Layout


L* - Standard shaft length 35 mm All dimensions given from component side

## How to Order



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