

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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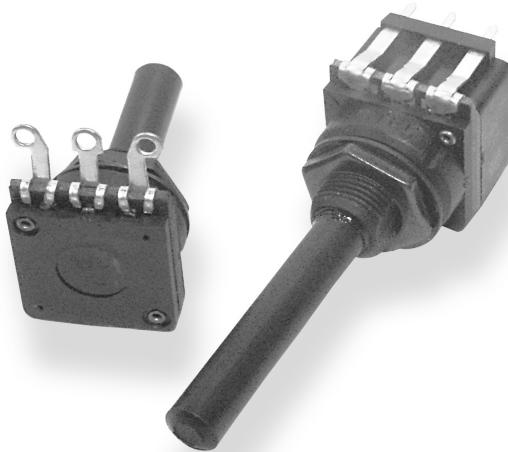
## Type 17P Series

### 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:	1K to 1M (linear), 4K7 to 470K (non linear)
Resistance Value:	1, 2.2 and 4.7 in each decade
Resistance Tolerance:	± 20% (10% by selection)
Rated Dissipation at 20°C:	0.25W (linear), 0.125W (non linear)
Limiting Element Voltage:	350V DC or AC (rms)
Electrical Rotation:	267° without switch, 232° with switch
Terminal Resistance:	5Ω, maximum
Noise (ENR):	2% maximum (linear), 3% maximum (non linear)
Insulation Resistance:	4GΩ, minimum
Voltage Proof:	1kV AC peak

### Characteristics - Environmental

Limits of Resistance Change:	15% (after 1000hrs. endurance)
Temperature Characteristics of Resistance:	5% (20°C to 70°C)
Bump Severity:	390m/s <sup>2</sup> , 4000 bumps
Vibration Severity:	10 - 500Hz, 0.75 mm or 98M/s <sup>2</sup>
Climatic Category:	25/70/04
Mechanical Endurance:	20000 operations (minimum)

### Characteristics - Mechanical

Operating Torque:	15mNm maximum
Mechanical Rotation:	300° nominal
End Stop Torque:	350mNm maximum

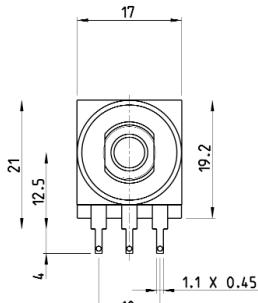
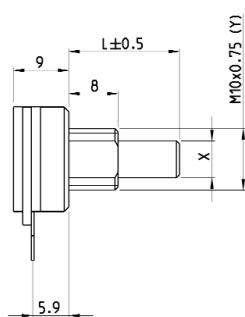
### Characteristics - Switch

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

## Type 17P Series

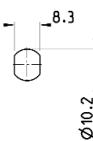
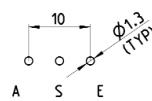
## Dimensions

## Single Potentiometer

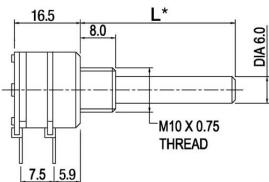


## PCB Layout

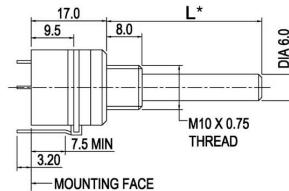
## Bush Mounting Panel Cutout



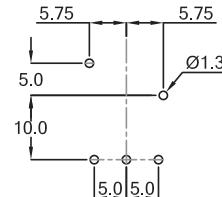
## Dual Potentiometer



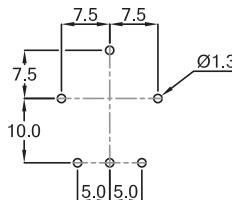
## Single Switched Potentiometer



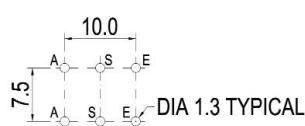
## Rotary Switch PCB Layout



## Push-Push Switch PCB Layout



## Dual Potentiometer PCB Layout



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

## How to Order

17PE	S	A	102	M	B	25	N	C
<b>Common Part</b> 17PC - P.C. 17PE - Eyelet		<b>Resistor Law</b> A - Linear B - Log C - Inv. Log		<b>Tolerance</b> M - 20% K - 10%		<b>Shaft Length</b> FMF in mm 25mm standard minimum shaft length with P style switch is 19mm		<b>Detent</b> C - Centre detent

Product Identification
S - Standard single
X - Customer special
D - Standard dual

Resistance Value
The first two digits are significant figures of the resistance value and the third one denotes the number of zeros following. e.g. 4K7: 472 47K: 473 470K: 474

Shaft Style
A - Plain 6mm
B - Slotted 6mm
C - Flatted (5mm A/F)
D - Flatted (4mm A/F)
E - Plain 4mm
F - Flatted 6mm (4.6mm A/F)

Switch Details
A - DPST 4A/250V AC
B - SPST 1A
D - DPST 1A
E - SPST 4A
N - No Switch
P - Push push SPDT 10A
P switch only available on single gang styles

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