

RoHS COMPLIANT



**BOURNS®**

### Features

- Carbon element
- Insulated shaft
- Snap-in clip
- Center detent option
- Assorted pin layouts
- RoHS compliant\*



This series is obsolete and not recommended for new designs. Model PTV111 is an alternative option with a smaller size and footprint.

## PTV142B - 14 mm Dual Potentiometer

### Electrical Characteristics

Taper..... Linear, audio  
 Standard Resistance Range ..... 1 K ohms to 1 M ohms  
 Standard Resistance Tolerance..... ±20 %  
 Residual Resistance ..... 500 ohms or 1 % max.

### Environmental Characteristics

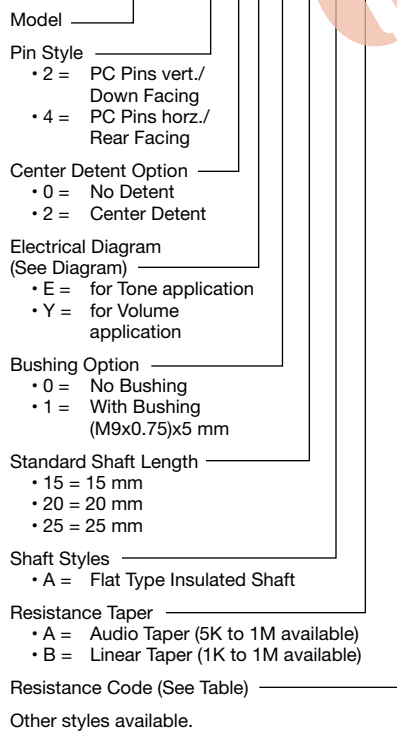
Operating Temp..... -10 °C to +50 °C  
 Power Rating..... 0.05 watt  
 Maximum Operating Voltage..... 50 V AC  
 Sliding Noise ..... 100 mV maximum

### Mechanical Characteristics

Mechanical Angle ..... 300 ° ±5 °  
 Rotational Torque ..... 20 to 200 g-cm  
 Detent Torque ..... 30 to 300 g-cm  
 Stop Strength ..... 5 kg-cm min.  
 Rotational Life ..... 15,000 cycles  
 Soldering Condition ..... 300 °C max. within 3 seconds  
 Hardware ..... One flat washer and mounting nut supplied per potentiometer with bushing

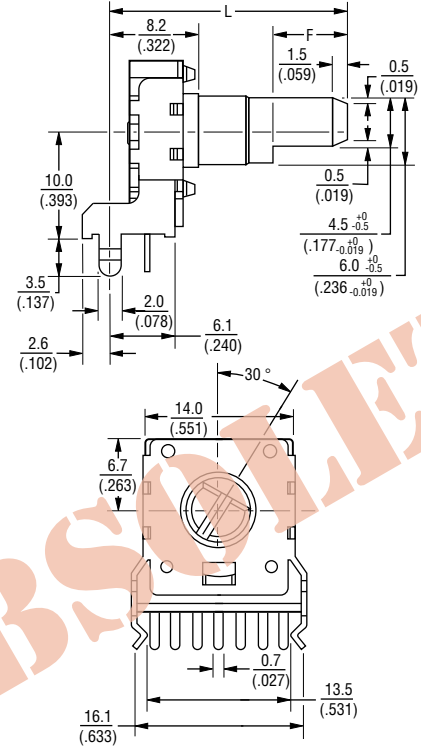
### How To Order

**PTV142B 2 0 E 1 20 A A 203**

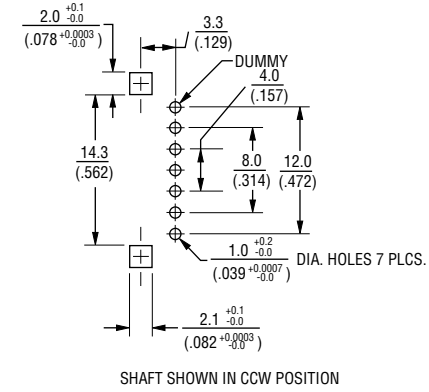


### Product Dimensions

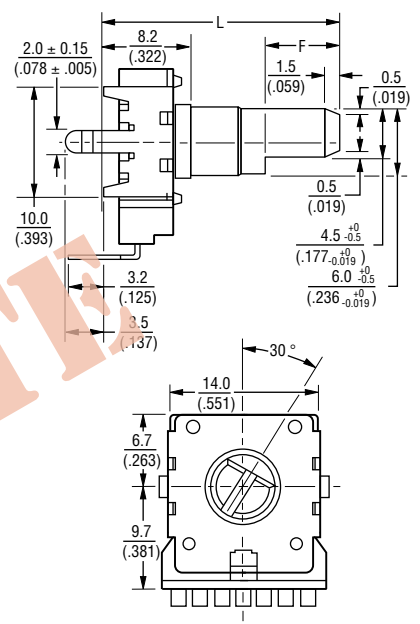
PTV142B-2 No Bushing



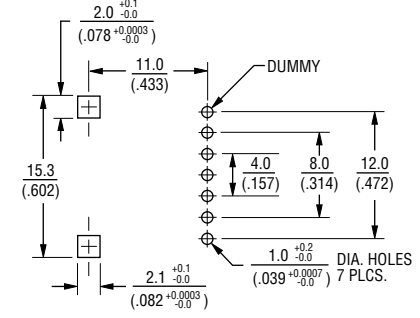
RECOMMENDED PCB LAYOUT



PTV142B-4 No Bushing



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Dimensions Without Bushing

L	15 (.591)	20 (.787)	25 (.984)
F	4.5 (.177)	7 (.276)	12 (.472)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

# Applications

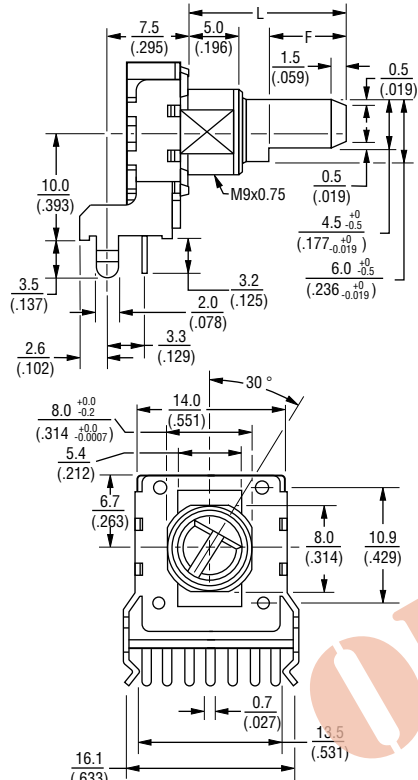
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

## PTV142B - 14 mm Dual Potentiometer

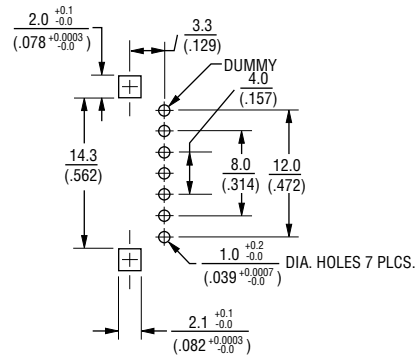


### Product Dimensions

PTV142B-2 With Bushing

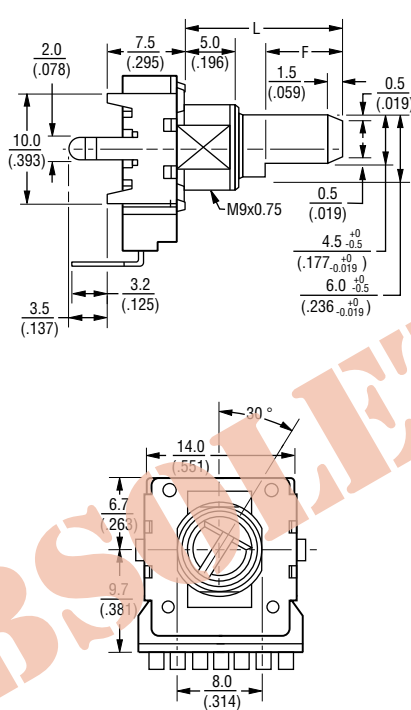


RECOMMENDED PCB LAYOUT

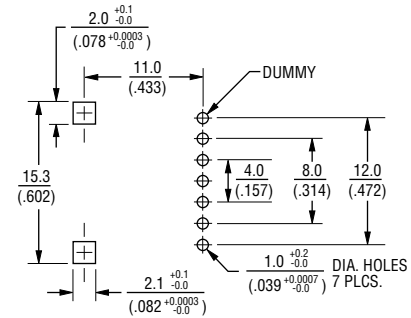


SHAFT SHOWN IN CCW POSITION

PTV142B-4 With Bushing



RECOMMENDED PCB LAYOUT

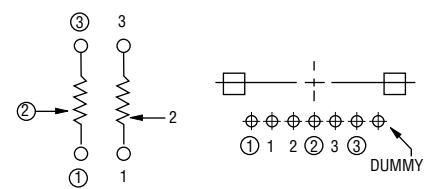


SHAFT SHOWN IN CCW POSITION

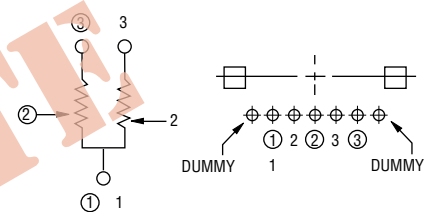
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Electrical Diagrams

'E' FOR TONE APPLICATION



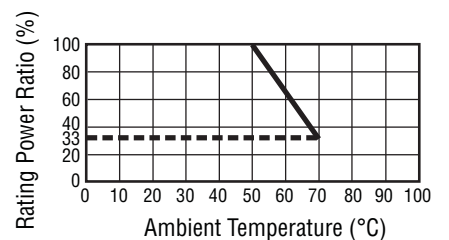
'Y' FOR VOLUME APPLICATION



### Standard Resistance Table

Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

### Derating Curve



### Dimensions With Bushing

L	$\frac{15}{(.591)}$	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$
F	$\frac{7}{(.276)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$

REV. 06/13

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