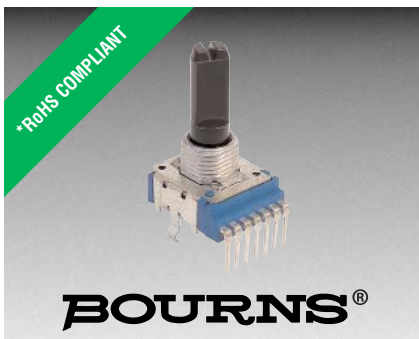




## Features

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

## Applications

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

# 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

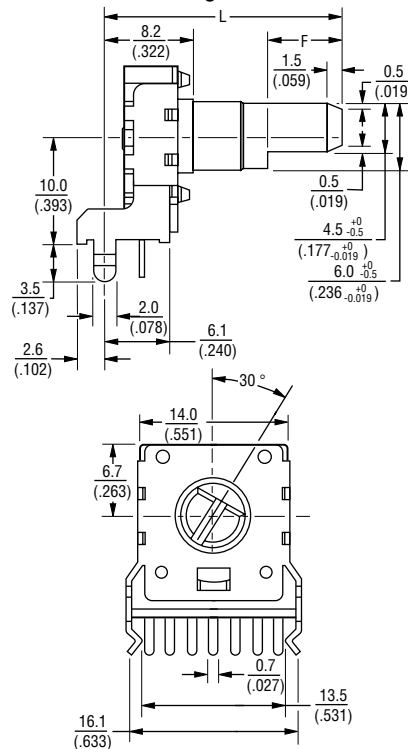
## How To Order

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

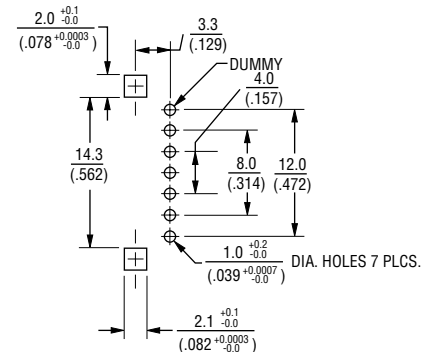
Model \_\_\_\_\_  
 Pin Style \_\_\_\_\_  
 • 2 = PC Pins vert./Down Facing  
 • 4 = PC Pins horz./Rear Facing  
 Center Detent Option \_\_\_\_\_  
 • 0 = No Detent  
 • 2 = Center Detent  
 Electrical Diagram \_\_\_\_\_  
 (See Diagram)  
 • E = for Tone application  
 • Y = for Volume application  
 Bushing Option \_\_\_\_\_  
 • 0 = No Bushing  
 • 1 = With Bushing (M9x0.75)x5 mm  
 Standard Shaft Length \_\_\_\_\_  
 • 15 = 15 mm  
 • 20 = 20 mm  
 • 25 = 25 mm  
 Shaft Styles \_\_\_\_\_  
 • A = Flat Type Insulated Shaft  
 Resistance Taper \_\_\_\_\_  
 • A = Audio Taper (5K to 1M available)  
 • B = Linear Taper (1K to 1M available)  
 Resistance Code (See Table) \_\_\_\_\_  
 Other styles available.

## Product Dimensions

PTV142B-2 No Bushing

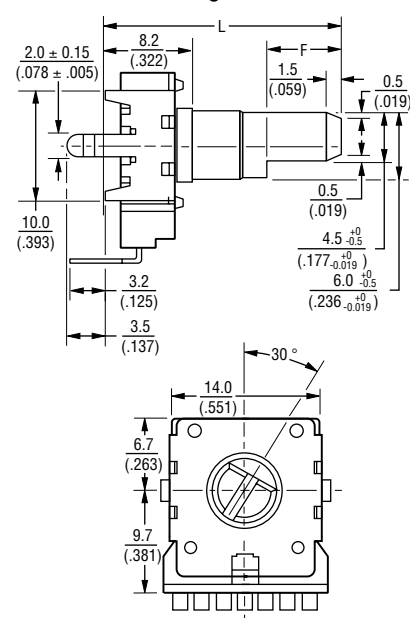


RECOMMENDED PCB LAYOUT

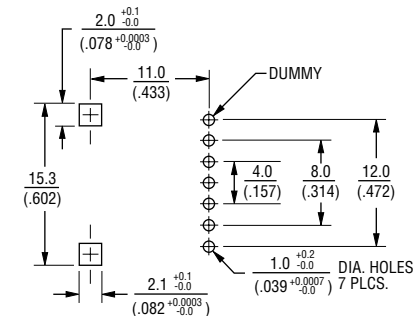


SHAFT SHOWN IN CCW POSITION

PTV142B-4 No Bushing



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

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

## Dimensions Without Bushing

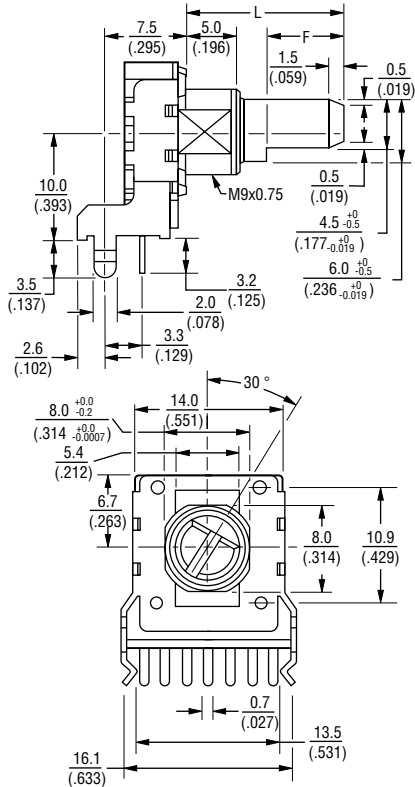
|   |               |              |              |
|---|---------------|--------------|--------------|
| L | 15<br>(.590)  | 20<br>(.787) | 25<br>(.984) |
| F | 4.5<br>(.177) | 7<br>(.275)  | 12<br>(.472) |

# PTV142B - 14 mm Dual Potentiometer

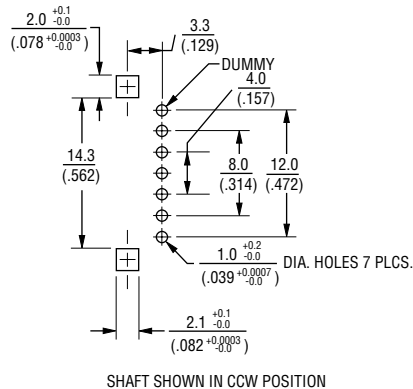
**BOURNS®**

## Product Dimensions

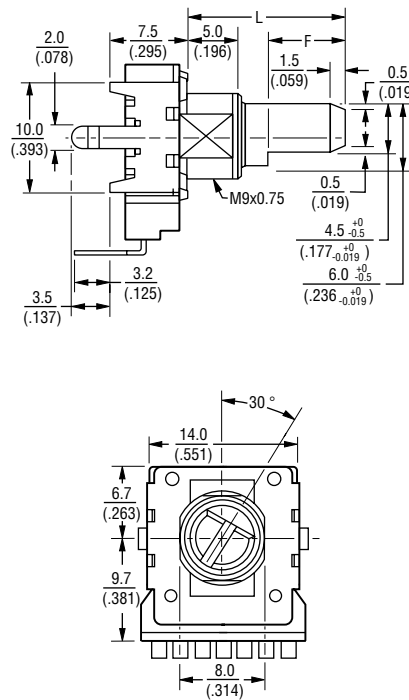
**PTV142B-2 With Bushing**



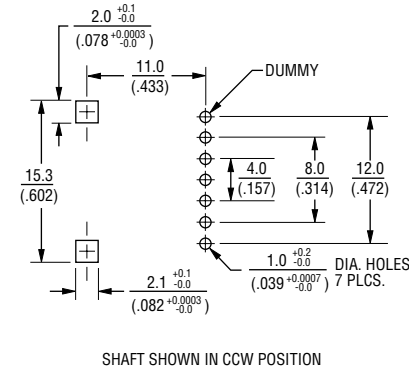
**RECOMMENDED PCB LAYOUT**



**PTV142B-4 With Bushing**



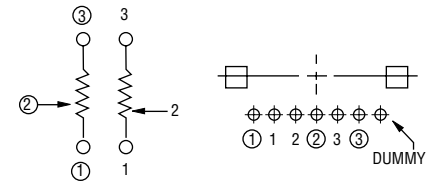
**RECOMMENDED PCB LAYOUT**



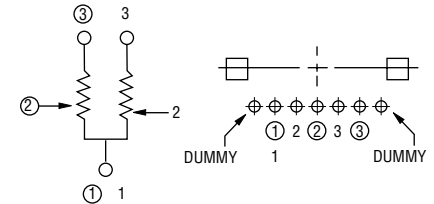
DIMENSIONS ARE:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Electrical Diagrams

**'E' FOR TONE APPLICATION**



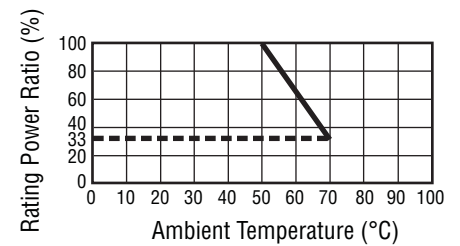
**'Y' FOR VOLUME APPLICATION**



## 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 | 15<br>(.590) | 20<br>(.787) | 25<br>(.984) |
| F | 7<br>(.275)  | 12<br>(.472) | 12<br>(.472) |

REV. 05/09

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.