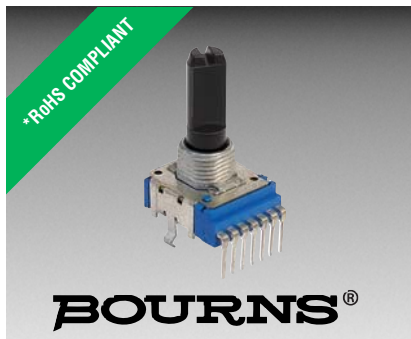




Features

- 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This series is obsolete and not recommended for new designs.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..... $\pm 20\%$
Residual Resistance
..... 500 ohms or 1 % max.

Environmental Characteristics

Operating Temp..... -10°C to $+50^{\circ}\text{C}$
Power Rating..... 0.05 watt
Maximum Operating Voltage..... 50 V AC
Sliding Noise 100 mV maximum

Mechanical Characteristics

Mechanical Angle $300^{\circ} \pm 5^{\circ}$
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

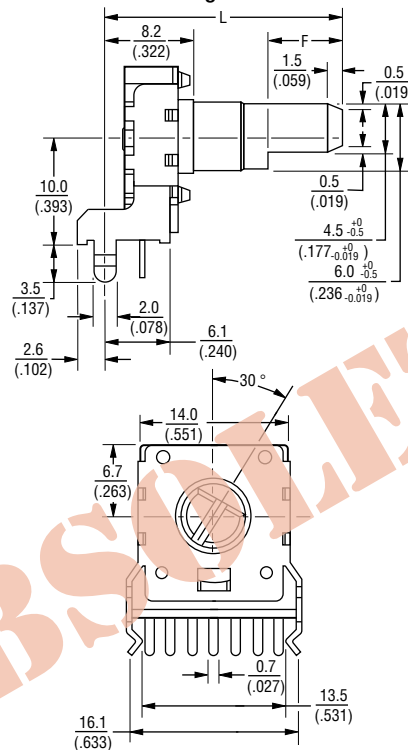
How To Order

PTV142B 2 0 E 1 20 A A 203

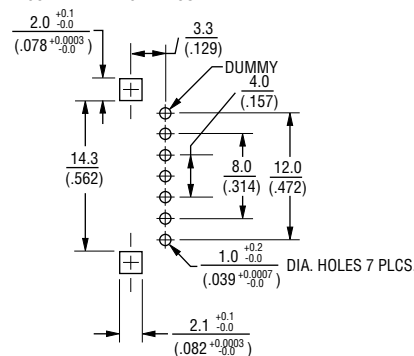
Model _____
Pin Style _____
• 2 = PC Pins vert./
Down Facing
• 4 = PC Pins horz./
Rear Facing
Center Detent Option _____
• 0 = No Detent
• 2 = Center Detent
Electrical Diagram
(See Diagram) _____
• E = for Tone application
• Y = for Volume
application
Bushing Option _____
• 0 = No Bushing
• 1 = With 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

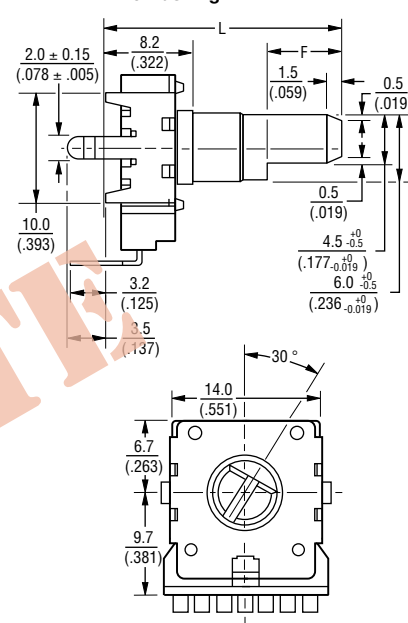


RECOMMENDED PCB LAYOUT

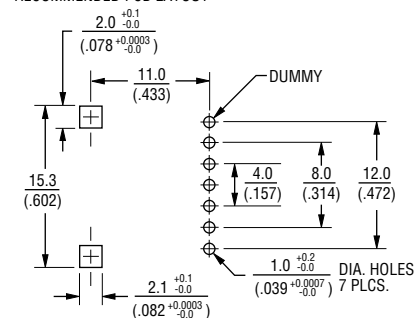


SHAFT SHOWN IN CCW POSITION

PTV142B-4 No Bushing



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

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

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

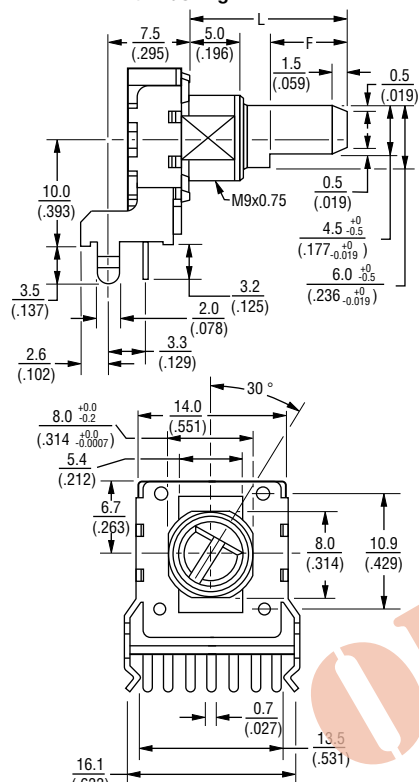
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PTV142B - 14 mm Dual Potentiometer

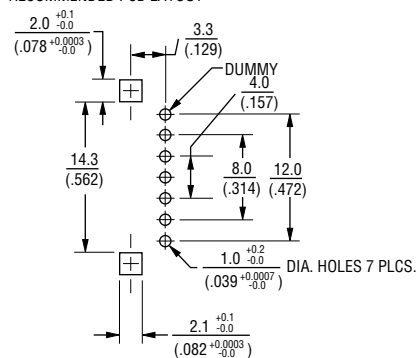
BOURNS®

Product Dimensions

PTV142B-2 With Bushing

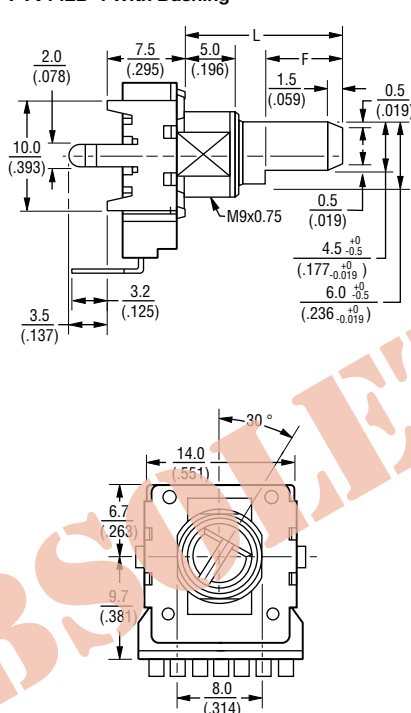


RECOMMENDED PCB LAYOUT

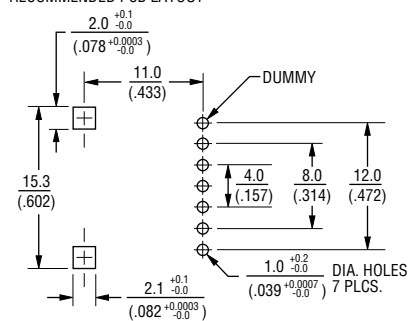


SHAFT SHOWN IN CCW POSITION

PTV142B-4 With Bushing



RECOMMENDED PCB LAYOUT

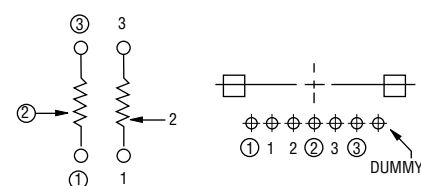


SHAFT SHOWN IN CCW POSITION

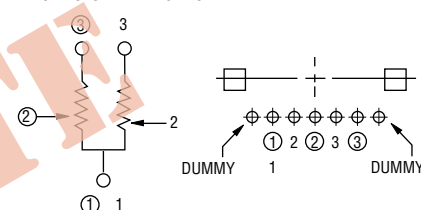
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Electrical Diagrams

'E' FOR TONE APPLICATION



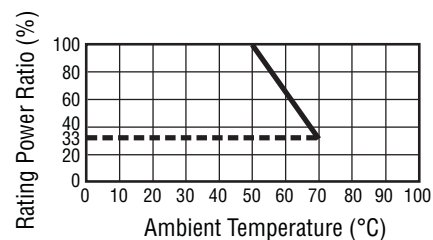
'Y' FOR VOLUME APPLICATION



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



REV. 06/13

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.

Dimensions With Bushing

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

Mouser Electronics

Authorized Distributor

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Bourns:

<u>PTV142B20E025AB104</u>	<u>PTV142B20E125AB203</u>	<u>PTV142B20E120AA102</u>	<u>PTV142B20E120AA103</u>
<u>PTV142B20E120AA104</u>	<u>PTV142B20E120AA203</u>	<u>PTV142B20E120AA204</u>	<u>PTV142B20E120AA502</u>
<u>PTV142B20E120AA503</u>	<u>PTV142B20E120AA504</u>	<u>PTV142B20E120AB102</u>	<u>PTV142B20E120AB103</u>
<u>PTV142B20E120AB104</u>	<u>PTV142B20E120AB203</u>	<u>PTV142B20E120AB204</u>	<u>PTV142B20E120AB502</u>
<u>PTV142B20E120AB503</u>	<u>PTV142B20E120AB504</u>	<u>PTV142B20Y120AA103</u>	<u>PTV142B40E020AA104</u>
<u>PTV142B40E120AA102</u>	<u>PTV142B40E120AA103</u>	<u>PTV142B40E120AA104</u>	<u>PTV142B40E120AA203</u>
<u>PTV142B40E120AA204</u>	<u>PTV142B40E120AA502</u>	<u>PTV142B40E120AA503</u>	<u>PTV142B40E120AB102</u>
<u>PTV142B40E120AB103</u>	<u>PTV142B40E120AB104</u>	<u>PTV142B40E120AB203</u>	<u>PTV142B40E120AB204</u>
<u>PTV142B40E120AB502</u>	<u>PTV142B40E120AB503</u>	<u>PTV142B40E120AB504</u>	<u>PTV142B40E125AB103</u>
<u>PTV142B42E020AB104</u>	<u>PTV142B42E025AB503</u>	<u>PTV142B20E115AB203</u>	<u>PTV142B22E115AB203</u>