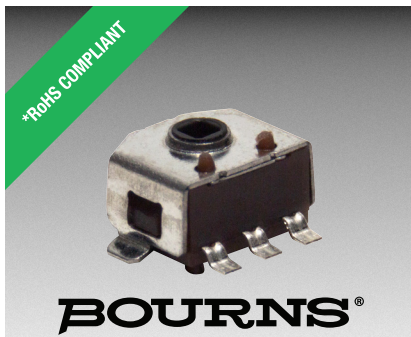




Features

- Compact design
- High reliability
- Surface mount
- RoHS compliant*

Applications

- Micro headphones
- Smart wearable devices

PEC04 Series – 4 mm Incremental Micro Encoder

Electrical Characteristics

Output.....	2-bit quadrature code
Contact Rating.....	10 mA @ 5 VDC
Insulation Resistance.....	50 MΩ min. @ 50 VDC
Dielectric Strength	
Sea Level.....	50 VAC 1 min.
Electrical Travel.....	Continuous
Sliding Bounce.....	5 ms max.
Resolution.....	6 or 12 pulses in 360 ° rotation

Environmental Characteristics

Operating Temperature Range.....	-20 °C to +70 °C
Storage Temperature Range.....	-35 °C to +85 °C
Soldering Condition	
Dip Soldering.....	260 °C for 3 s.
Manual Soldering.....	300 °C for 3 s.
IP Rating.....	IP 40

Mechanical Characteristics

Mechanical Angle.....	360 ° continuous
Detent Torque.....	10 to 100 gf.cm
Rotational Life.....	30,000 cycles

Product Characteristics

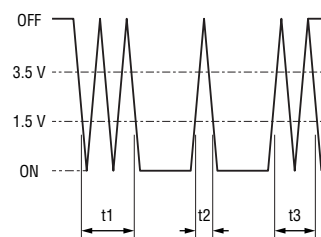
Weight.....	0.1 grams
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Additional Information

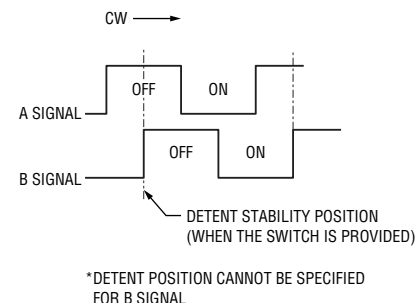
Click these links for more information:



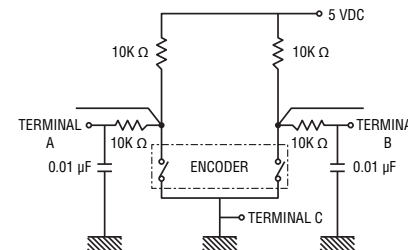
Switch Circuit



Quadrature Output Table



Suggested Filter Circuit



BOURNS®

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WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

**Excluding FDA Class III devices and generally equivalent classification outside of the United States.

***Devices are tested using standard noise reduction filters. For optimum performance, designers should use noise reduction filters in their circuits.

Specifications are subject to change without notice.

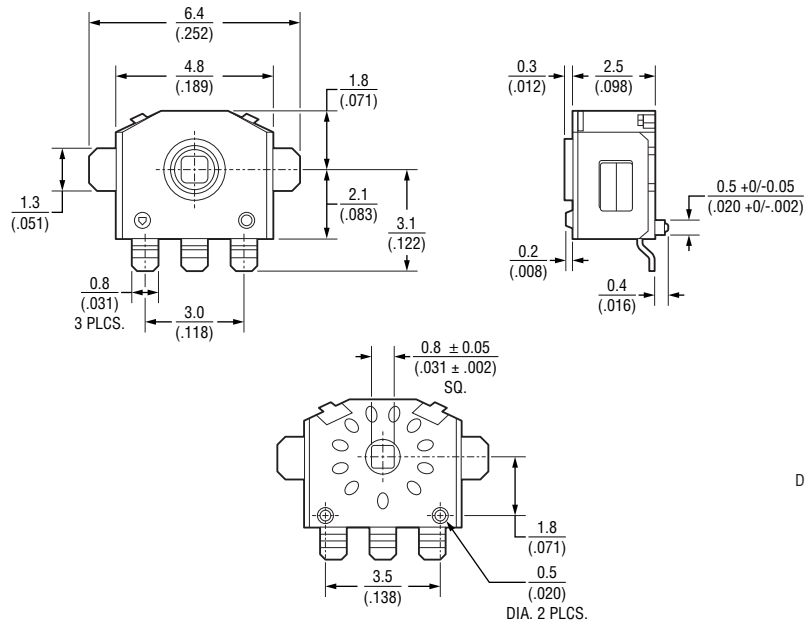
Users should verify actual device performance in their specific applications.

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PEC04 Series – 4 mm Incremental Micro Encoder

BOURNS®

Product Dimensions



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

How To Order

PEC04 - 1 02 P - N 0006

Model Series _____
 4 mm Incremental Micro Encoder

Detent Option _____
 1 = 12 Detents

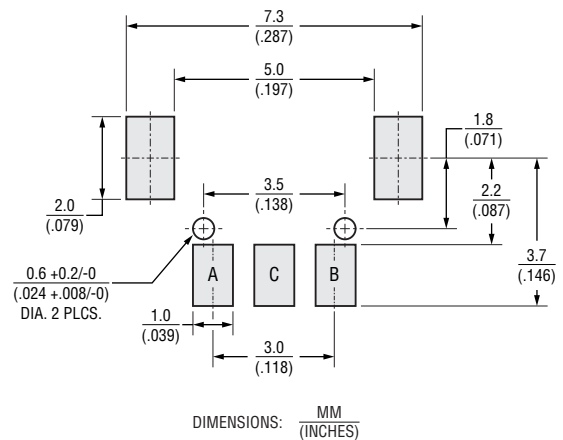
Standard Shaft Length _____
 02 = 0.2 mm

Shaft Style _____
 P = Plastic Shaft

Switch Configuration _____
 N = No Switch

Resolution _____
 0006 = 6 Pulses per 360 ° Rotation
 0012 = 12 Pulses per 360 ° Rotation

Recommended PCB Layout



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

Specifications are subject to change without notice.

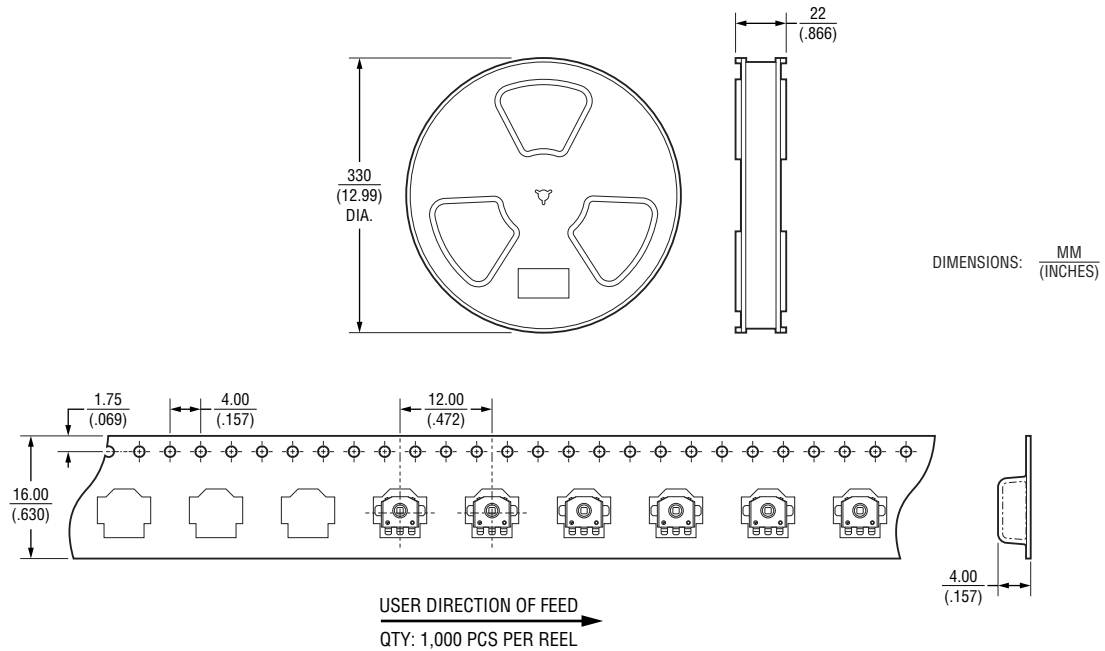
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PEC04 Series – 4 mm Incremental Micro Encoder

BOURNS®

Packaging Specifications



REV. 07/25

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