

Features

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

Applications

- Desk lamps
- Smart home appliances

PEC06 – 6 mm Incremental Micro Encoder

Electrical Characteristics

Output.....	2-bit quadrature code
Contact Rating.....	10 mA @ 5 VDC
Insulation Resistance.....	50 MΩ min. @ 110 VDC
Dielectric Strength	
Sea Level.....	110 VAC 1 min.
Electrical Travel.....	Continuous
Sliding Bounce.....	1 ms max.
Resolution.....	6 pulses in 360 ° rotation

Environmental Characteristics

Operating Temperature Range.....	-25 °C to +80 °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.....	20,000 cycles

Switch Characteristics

Switch Type.....	Contact push ON momentary SPST
Switch Travel.....	0.1 +0.2/-0 mm
Switch Actuation Force.....	255 ±153 gf
Power Rating (Resistance Load).....	10 mA @ 5 VDC

Product Characteristics

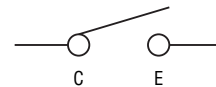
Weight.....	0.25 grams
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Additional Information

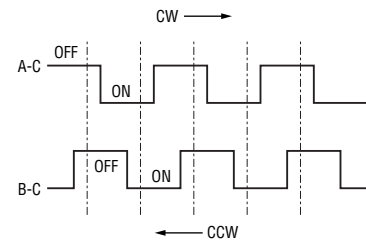
Click these links for more information:



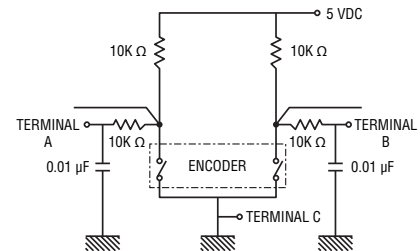
Switch Circuit



Quadrature Output Table



Suggested Filter Circuit



BOURNS®

Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: euocus@bourns.com

www.bourns.com



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.

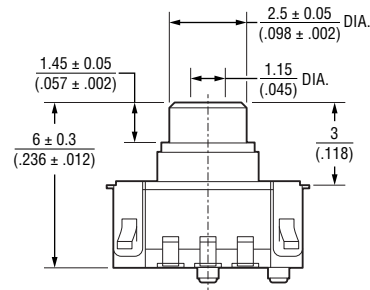
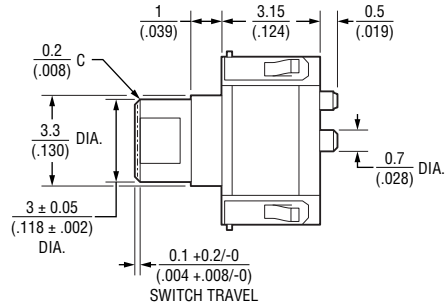
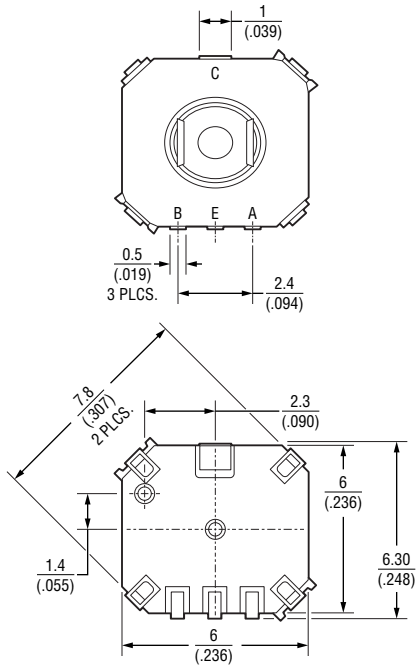
Users should verify actual device performance in their specific applications.

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PEC06 – 6 mm Incremental Micro Encoder



Product Dimensions



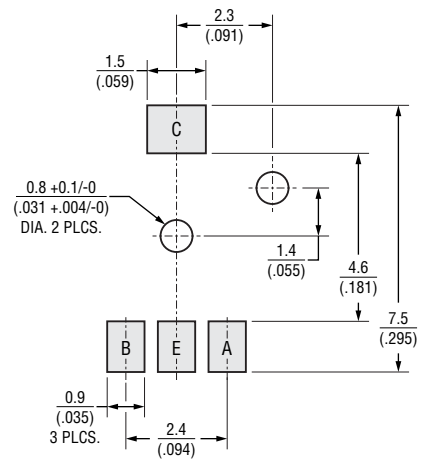
DIMENSIONS: $\frac{\text{MM}}{\text{INCHES}}$

How To Order

PEC06 - 1 03 F - S 0006

- Model Series _____
- 6 mm Incremental Micro Encoder
- Detent Option _____
- 1 = 12 Detents
- Standard Shaft Length _____
- 03 = 0.3 mm
- Shaft Style _____
- F = Plastic Flatted Shaft
- Switch Configuration _____
- S = Push Momentary Switch
- Resolution _____
- 0006 = 6 Pulses per 360 ° Rotation

Recommended PCB Layout



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

Specifications are subject to change without notice.

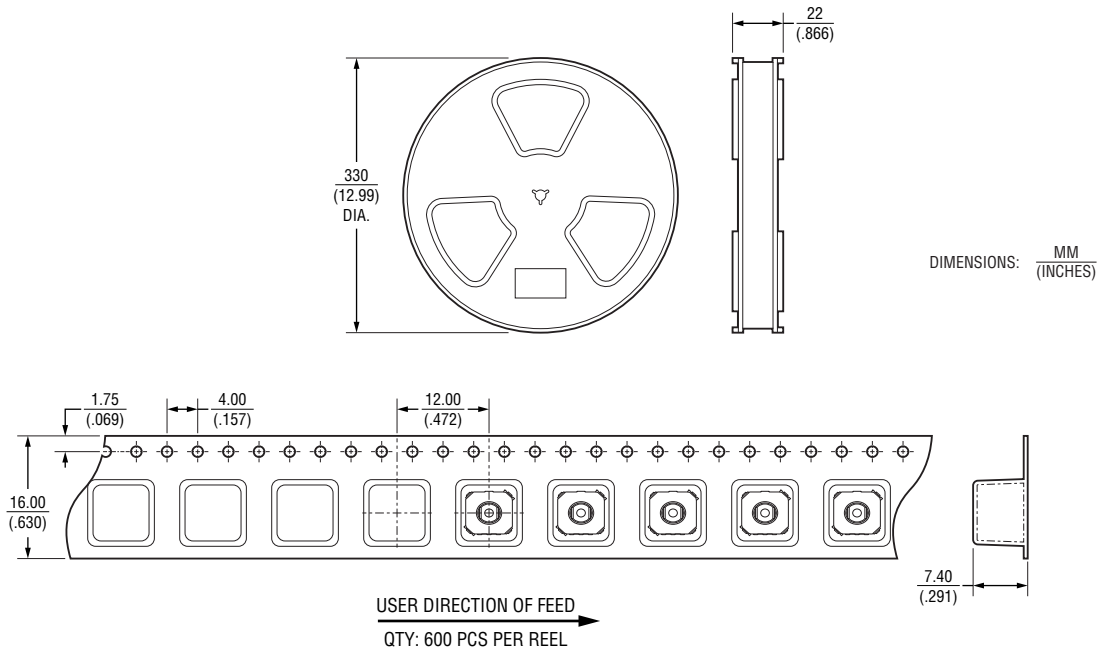
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BOURNS®

Packaging Specifications



REV. 07/25

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