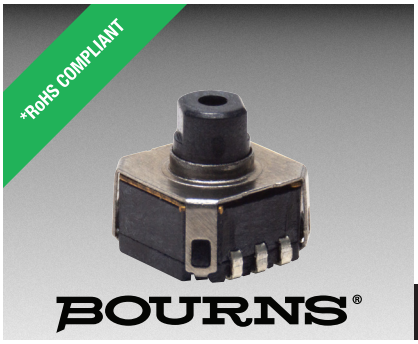



## Features

- 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

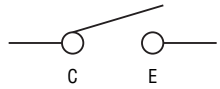
| | |
|---|---|
| Weight | 0.25 grams |

### Additional Information

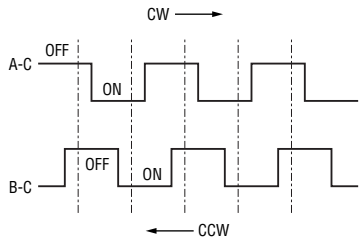
Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

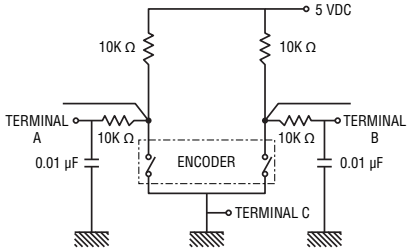
### Switch Circuit




### Quadrature Output Table




### Suggested Filter Circuit

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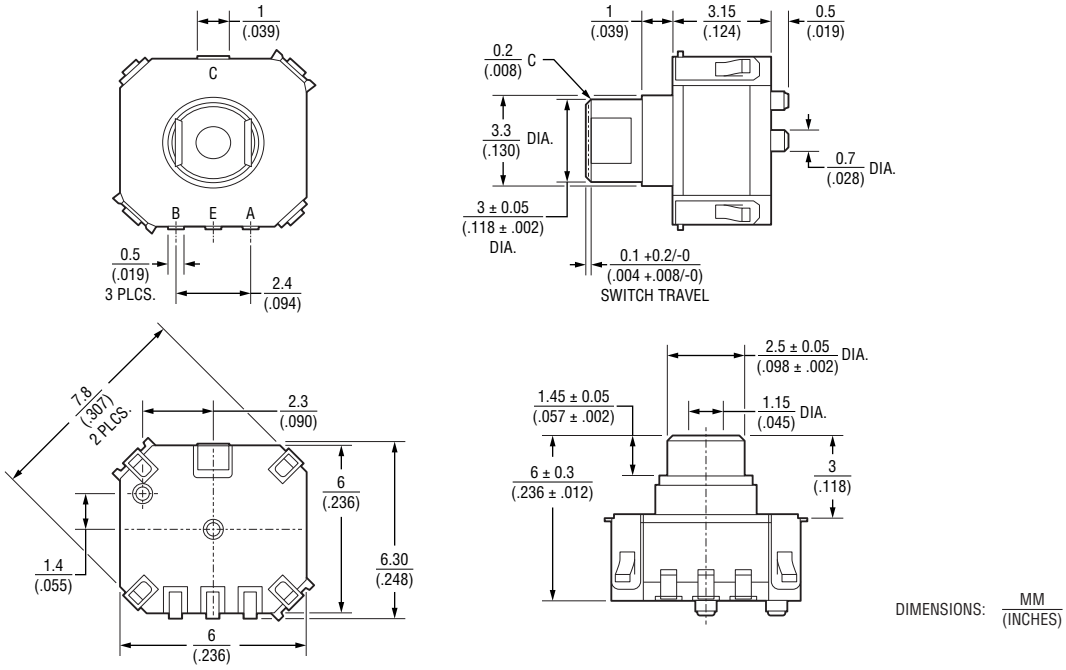
**WARNING**
**Cancer and Reproductive Harm**
www.P65Warnings.ca.gov

*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.

## Product Dimensions




## How To Order

**PEC06 - 1 03 F - S 0006**

Model Series
6 mm Incremental Micro Encoder

Detent Option
1 = 12 Detents

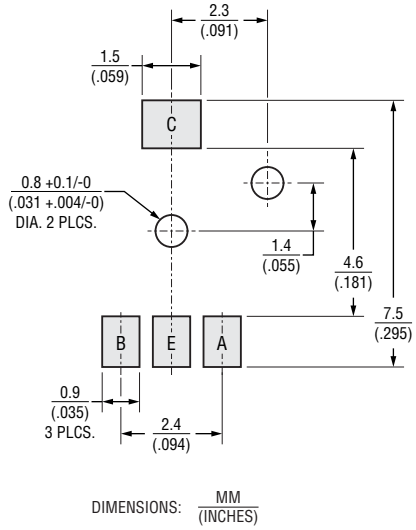
Standard Shaft Length
03 = 0.3 mm

Shaft Style
F = Plastic Flatted Shaft

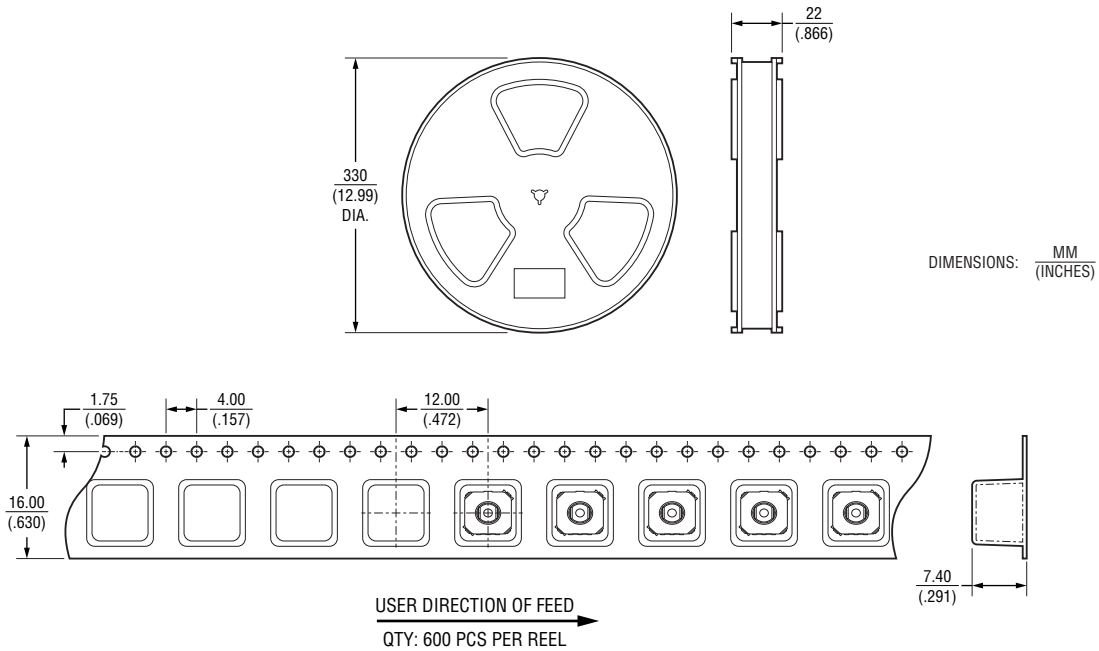
Switch Configuration
S = Push Momentary Switch

Resolution
0006 = 6 Pulses per 360 ° Rotation

## Recommended PCB Layout



## Packaging Specifications



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