PEC11R Series - 12 mm Incremental Encoder

### Electrical Characteristics
- **Output**: 2-bit quadrature code
- **Contact Rating**: 10 mA @ 5 VDC
- **Insulation Resistance**: 100 megohms @ 250V DC
- **Dielectric Withstanding Voltage**: 300 VAC min.
- **Electrical Travel**: Continuous
- **Power Rating (Resistive Load)**: 60 max** RPM (Operating)
- **Dielectric Withstanding Voltage**: 100 megohms @ 250V DC
- **RPM (Operating)**: 60 max**
- **Contact Resistance**: 100 milliohms @ 5 VDC

### Environmental Characteristics
- **Operating Temperature Range**: -30 °C to +70 °C (-22 °F to +158 °F)
- **Storage Temperature Range**: -30 °C to +70 °C (-22 °F to +158 °F)
- **Humidity**: 10 to 55% RH / 1 min. / Amplitude 1.5 mm
- **Vibration**: MIL-STD-202, Method 103B, Condition B
- **Shock**: 100 G
- **RPM**: 60 max**
- **Sea Level**: 300 VAC min
- **Dielectric Withstanding Voltage**: 100 megohms @ 250V DC
- **Electrical Travel**: Continuous
- **Contact Resistance**: 100 milliohms @ 5 VDC

### Switch Characteristics
- **Switch Type**: Contact Push ON Momentary SPST
- **Power Rating (Resistive Load)**: 10 mA at 5 VDC
- **Switch Travel**: 0.5 ± 0.3 mm
- **Switch Actuation Force**: 610 ± 306 gf (8.47 ± 4.24 oz.in)
- **Contact Resistance**: 100 milliohms @ 5 VDC

### Mechanical Characteristics
- **Mechanical Angle**: 360 ° Continuous
- **Torque**: 2.0 to 9.0 gf-cm (0.14 to 0.62 oz.in)
- **Weight**: 5 gm (0.17 oz) max.
- **Terminals**: Printed circuit board terminals
- **Soldering Condition**: Wave Soldering
- **Hand Soldering**: Not recommended
- **Rotational Life**: 30,000 cycles min.
- **Switch Life**: 20,000 cycles min.

### Additional Information
Click these links for more information:

- **Product**
- **Technical Library**
- **Inventory**
- **Samples**
- **Contact**

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**Features**
- Push switch option
- Compact, rugged design
- High reliability
- Metal bushing/shaft
- RoHS compliant*

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

**Devices are tested using standard noise reduction filters. For optimum performance, designers should use noise reduction filters in their circuits.
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Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

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**CAUTION**
Do not store product in high temperature and humidity, direct sunlight and/or places where corrosive gases may be generated. Please use product within 6 months from the date of delivery and promptly after unpacking.
Applications
Level control, tuning and timer settings in:
- Audio-visual equipment
- Consumer electric appliances
- Radios
- Musical instrumentation
- Communications equipment

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