PER21 - 21 mm Low Profile Incremental Ring Encoder

**Features**
- Low profile incremental encoder
- High-class rotational feel
- Haptic detent feedback
- RoHS compliant*

**Electrical Characteristics**
- Output: 2-bit quadrature code
- Contact Rating: 10 mA @ 5 V DC
- Insulation Resistance: 100 megohms @ 250 V DC
- Dielectric Withstanding Voltage: 300 V AC
- Electrical Travel: Continuous
- Contact Bounce (15 RPM): 3 ms max.

**Environmental Characteristics**
- Operating Temperature: -10 °C to +60 °C
- Storage Temperature: -40 °C to +85 °C

**Mechanical Characteristics**
- RPM (Operating): 60 max.
- Mechanical Angle: 360 ° continuous
- Detent Torque: 70 to 170 gf-cm
- Rotational Life: 50,000 cycles

**Soldering Condition**
- Wave Soldering: 260 °C for 3 seconds
- Manual Soldering: 300 °C for 3 seconds

**Recommended PCB Layout**

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**Product Dimensions**

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**Additional Information**

Click these links for more information:
- PRODUCT TECHNICAL LIBRARY
- INVENTORY SAMPLES CONTACT

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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.

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

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** 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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How To Order

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1 = Single
P = PC Pins Down Facing
1 = 18 Detents (9 Pulses)
15 = 15 mm
N = No Switch
0009 = 9 Pulses per 360° Rotation
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