



Features

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

EC56 - 56mm Low Profile Incremental Ring Encoder

Electrical Characteristics

Output..... 2-bit quadrature code
 Contact Rating..... 1 mA @ 5 V DC
 Insulation Resistance
 100 MΩ @ 250 V DC
 Dielectric Withstanding Voltage
 Sea Level..... 300 V AC
 Electrical Travel Continuous
 Contact Bounce (15 RPM)..... 2 ms max.**

Environmental Characteristics

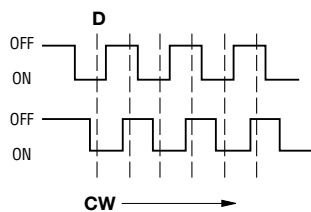
Operating Temperature..... -30 °C to +80 °C
 Storage Temperature..... -40 °C to +85 °C
 IP Rating..... IP 40
 Soldering Condition

Wave Soldering 260 °C for 5 s
 Manual Soldering..... 300 °C for 3 s

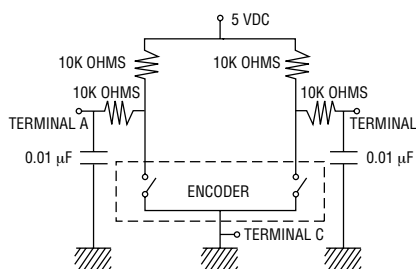
Mechanical Characteristics

RPM (operating) 60 max.
 Mechanical Angle 360 ° continuous
 Detent Torque 100 to 400 gf-cm
 Rotational Life..... 3 0,000 cycles

Quadrature Output Table



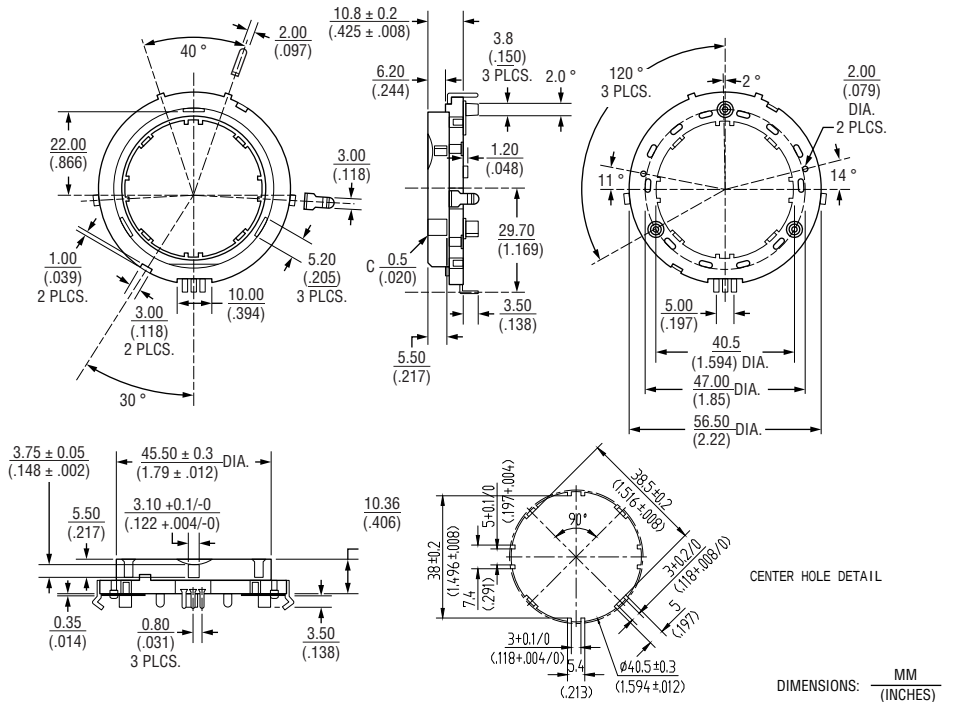
Suggested Filter Circuit



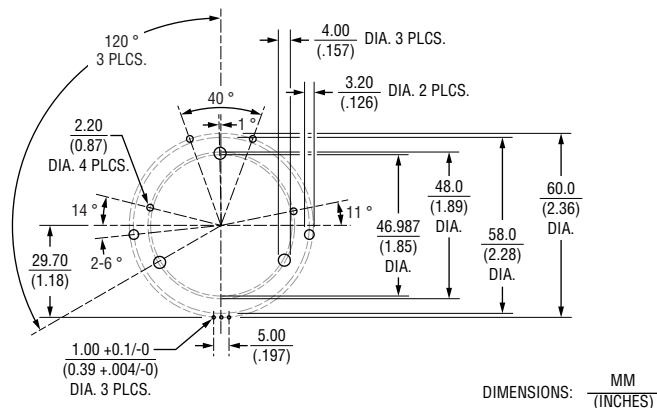
General Tolerance

Dimension:
 $X < 10 \pm 0.3\text{mm}$
 $10 \leq X < 30 \pm 0.5\text{mm}$
 $30 \leq X \leq 100 \pm 1\text{mm}$
 Angle: $\pm 5^\circ$

Product Dimensions



Recommended PCB Layout



How To Order

EC56A00V01-0001 XA115P2H108

Model

Resolution

15P = 15 Pulses 30 Detents