



Features

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

EC40 - 40mm 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

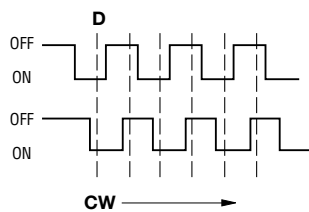
Operating Temperature..... -30 °C to +80 °C
 Storage Temperature..... -40 °C to +85 °C
 IP Rating..... IP 40
 Soldering Condition

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

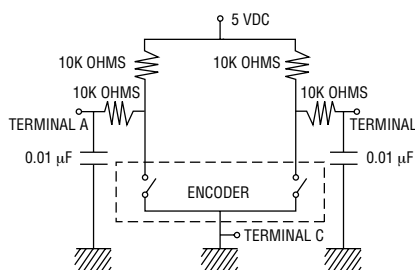
Mechanical Characteristics

RPM (operating)60 max.
 Mechanical Angle360 ° continuous
 Detent Torque..... 100 to 300 gf·cm
 Rotational Life..... 3 0,000 cycles

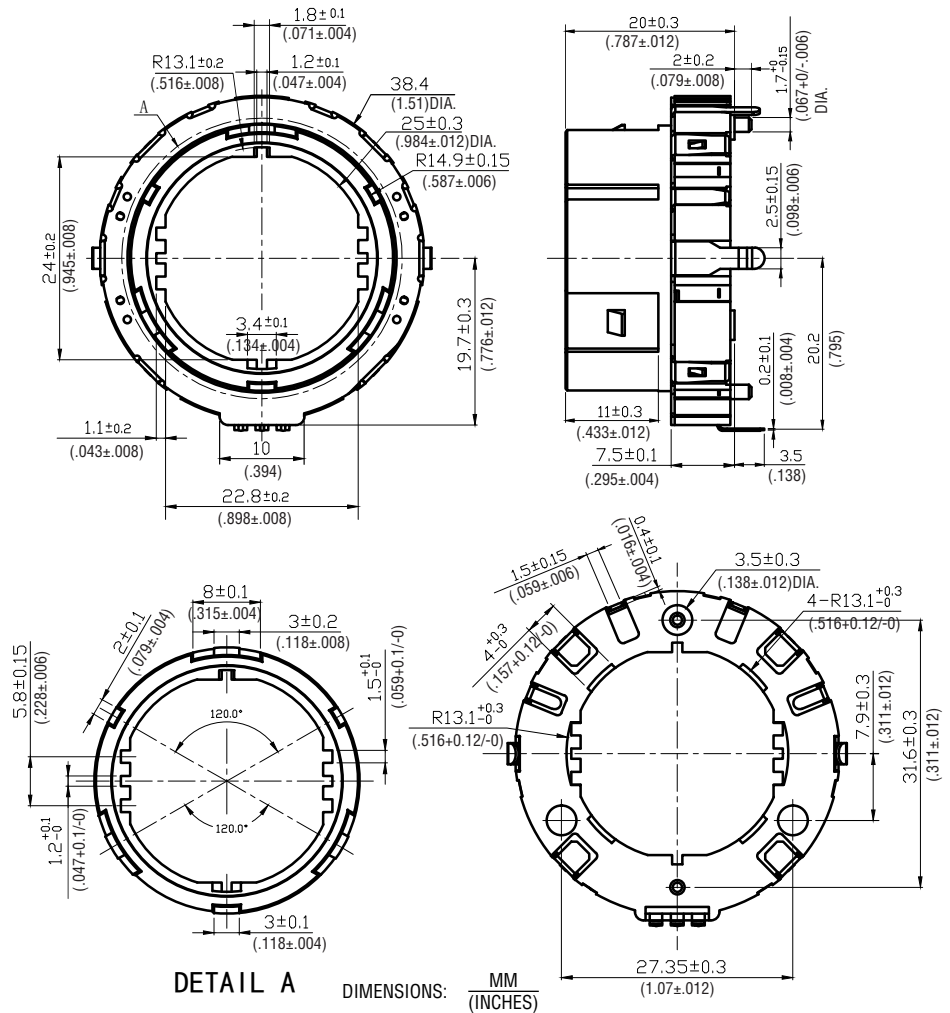
Quadrature Output Table



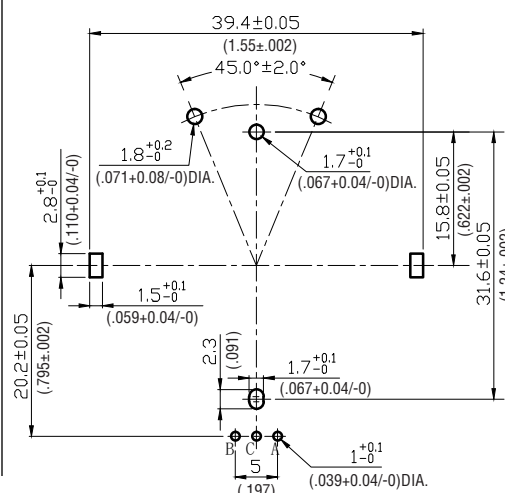
Suggested Filter Circuit



Product Dimensions



Recommended PCB Layout



How To Order

EC40A00V01-0002 XA015P2H200

Model

Resolution

15P = 15 Pulses 30 Detents

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: $\pm 5^\circ$