

☒ Economical    ☒ Metal Shaft  
☒ Low Current    ☒ Rugged Design

The technical drawing shows two views of the Molex connector:

- Side View (Left):** Shows the profile of the connector. Key dimensions include a total length of 21, a mounting tab width of 3, a main body diameter of Ø6, a distance of 12 from the end of the cable to the start of the main body, and a distance of 8 from the end of the main body to the mounting tab. The cable has a diameter of 0.635.
- Front View (Right):** Shows the circular face of the connector. Key dimensions include a total diameter of 21.5, a central hole diameter of Ø2.5, a distance of 8.5 from the center to the edge of the mounting tab, a height of 11.3 from the center to the top of the mounting tab, a base thickness of 11, a distance of 6 from the bottom of the base to the top of the pins, and a pin pitch of 0.635. The pins are numbered 1, 2, 3, and 4 from right to left. The overall width between the outermost pins is 7.62.

## ELECTRICAL

1. Input Voltage: 5.0 VDC  $\pm 5\%$
2. Current Consumption: 26mA nominal;  
30mA max.
3. Output Voltage: High: 4.2Vmin  
Low: 0.4Vmax
4. Max. Freq. Response: 500 Hz

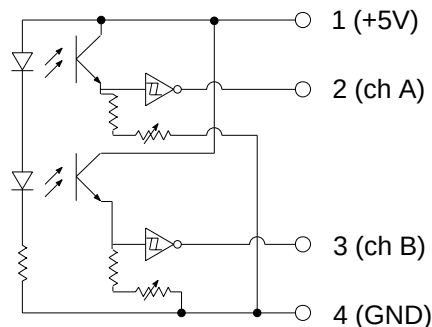
*MECHANICAL*

1. Max Shaft Load, radial: 1.0 kgf  
axial: 1.0 kgf
2. Rotational Angle: 360° continuous
3. Starting Torque: 50 gf•cm max.
4. Rotational Life:  $2.5 \times 10^6$  cycles

## ENVIRONMENTAL

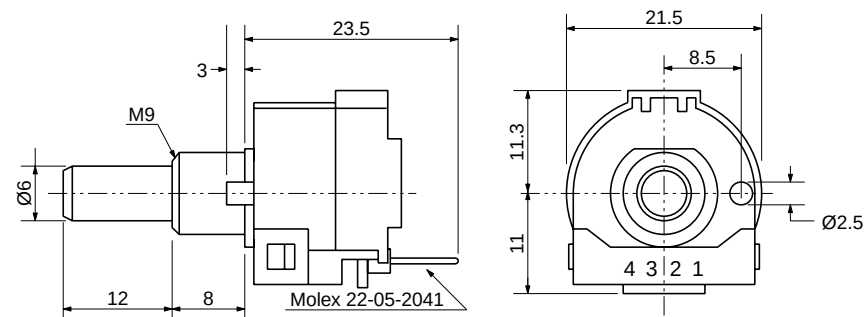
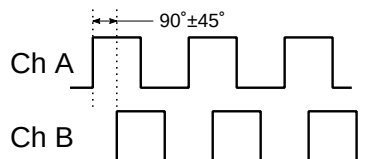
1. Operating Temp: 0° to +60° C
2. Storage Temp: -20° to +80° C
3. Humidity: 85% RH, no condensation
4. Vibration: 10 - 55 Hz, 1.5 mm, 2 hrs
5. Shock: 50G, 6ms, 3 axes, 3 reps

### OUTPUT CIRCUIT



### OUTPUT WAVEFORM

Counter clockwise rotation viewed from front



### Panel Mount/Straight (T) Type

## STANDARD RESOLUTIONS

**EC202AXXX**

|     |         |     |         |
|-----|---------|-----|---------|
| 025 | 25 P/R  | 050 | 50 P/R  |
| 075 | 75 P/R  | 100 | 100 P/R |
| 128 | 128 P/R |     |         |

*Resolutions are stated in cycles per revolution and can be resolved to 4x the cycle resolution (25= 100, 100= 400, etc.)*

## ORDERING INSTRUCTIONS

## EC202AXXA2XD

Resolution: \_\_\_\_\_ Pin Orientation: \_\_\_\_\_  
 025 = 25PPR      050 = 50PPR      S = Right Angle  
 075 = 75PPR      100 = 100PPR      T = Straight  
 128 = 128PPR



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|          |          |          |          |
|----------|----------|----------|----------|
| DRAWN BY | UPDATED  | CHECKED  | RELEASED |
| JAS      | 06/08/00 | 06/08/00 |          |

PART NO.

EC202AXXXA2XD

REV.

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