



PART NUMBER: EC251AB

DESCRIPTION: rotary encoder

ELECTRICAL SPECIFICATIONS

| | |
|-------------------------|--------------------------------|
| output waveform | Square wave |
| output signals | A, B phase |
| current consumption | 20 mA max. |
| output voltage | “H” “L” |
| | Vcc ~ 0.5 V min. 0.7 V max. |
| output current | -0.1 mA max. |
| supply voltage | 5 V dc ± 5% |
| output resolution (ppr) | 25 |
| frequency response | 100 Hz |

MECHANICAL SPECIFICATIONS

| | |
|-------------------------|--|
| max shaft load, radial: | 1 kgf |
| axial: | 1 kgf |
| starting torque | 0.4 ±0.2 N·cm max. (41 ±20 gf·cm max.) |
| rotational angle | 360° continuous |
| maximum speed | 120 RPM |
| rotational life | 1,000,000 cycles |
| weight | 20 g |

ENVIRONMENTAL SPECIFICATIONS

| | |
|----------------|-----------------------------|
| operating temp | 0° to +60° C |
| storage temp | -20° to +80° C |
| humidity | 85% RH, no condensation |
| vibration | 10 ~ 55 Hz. 1.5 mm, 2 hours |
| shock | 50 G, 6 ms, 3 axes, 3 reps |

ORDERING INSTRUCTIONS

EC251X050X

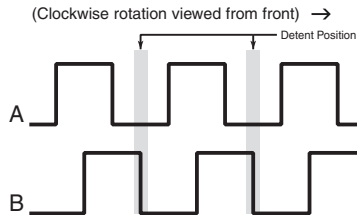
Detent:
A = Without detent
B = With detent

Termination options:
A = Solder holes
B = Connector
C = Cable
D = PC board mount

PART NUMBER: EC251AB

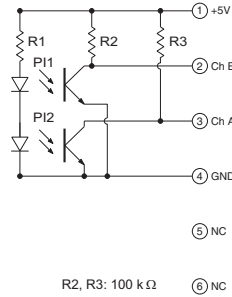
DESCRIPTION: rotary encoder

OUTPUT WAVEFORM

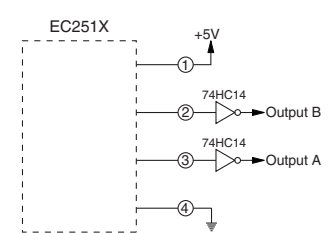


OUTPUT CIRCUIT

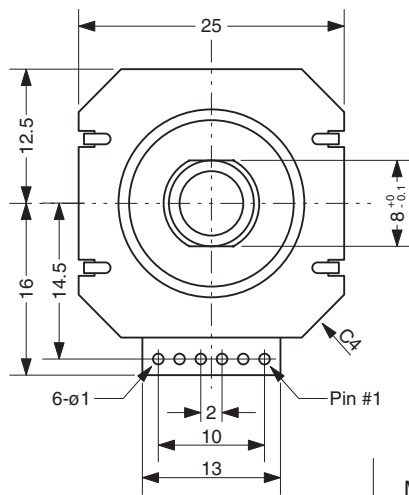
INTERNAL CIRCUIT



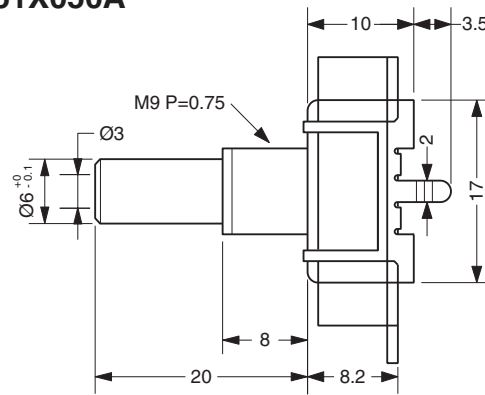
EXTERNAL CIRCUIT



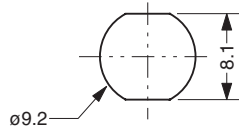
MECHANICAL DRAWING



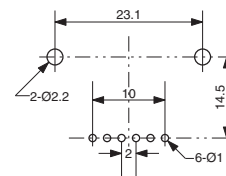
EC251X050A



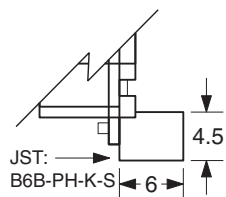
Mounting Hole Dimensions



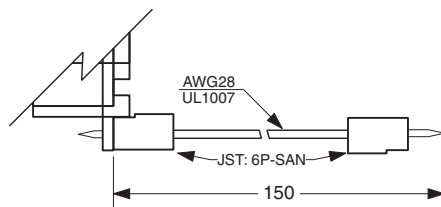
PCB Footprint



EC251X050B



EC251X050C



EC251X050D

