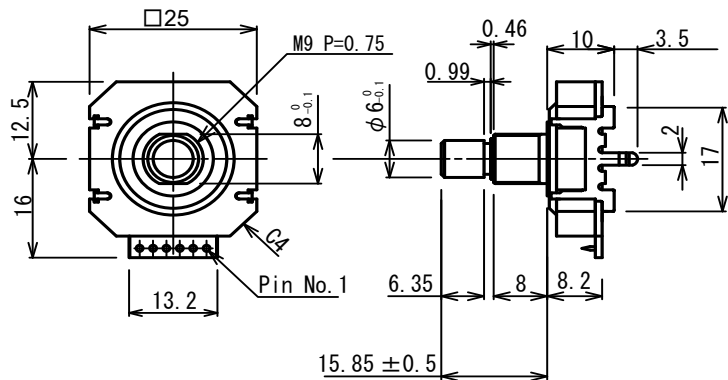
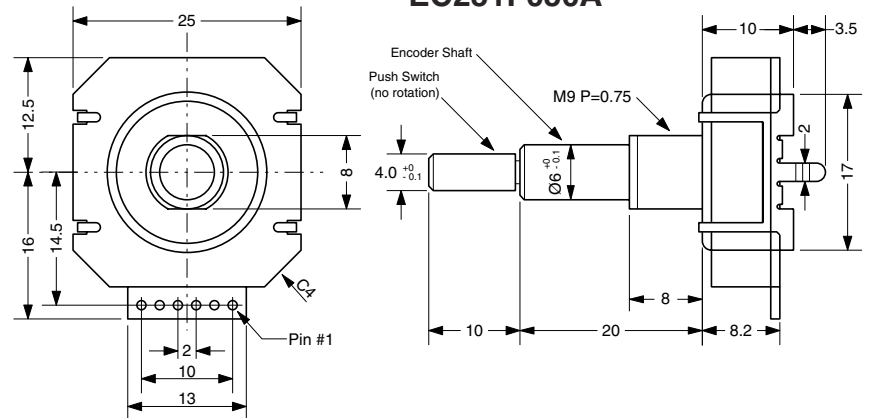


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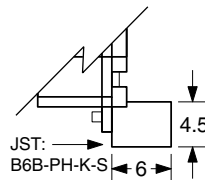
### EC251E050A



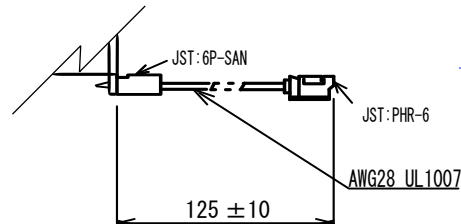
### EC251F050A



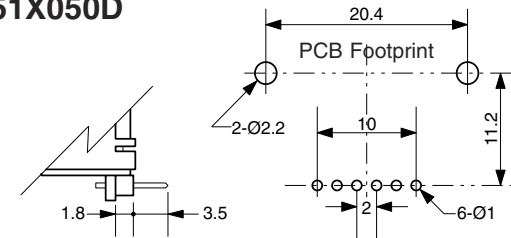
### EC251X050B



### EC251X050C



### EC251X050D



## SPECIFICATIONS

### ELECTRICAL

1. Input Voltage: 5.0 VDC ±5%
2. Resolution: 50PPR
3. Current Consumption: 30mA max.
4. Output Voltage: High: VCC-0.5Vmin  
Low: 0.7Vmax
5. Max. Freq. Response: 100Hz

### MECHANICAL

1. Max Shaft Load, radial: 1.0 kgf  
axial: 1.0 kgf
2. Rotational Angle: 360° continuous
3. Detent Torque: 0.4±0.3 N-cm
4. Maximum Speed: 120 RPM
5. Rotational Life: 1,000,000 cycles

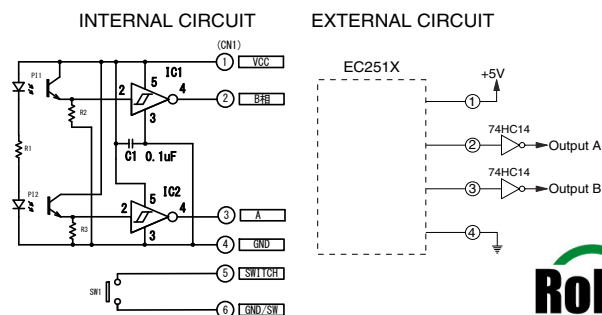
### ENVIRONMENTAL

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

### PUSH SWITCH

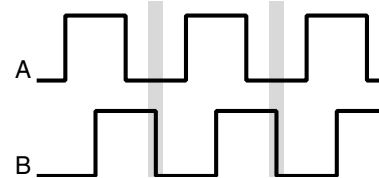
1. Rating: 12VDC, 50mA
2. Contact Resistance: 200mΩ max.
3. Insulation Resistance: 100MΩ min.
4. Voltage Withstand: 250VAC, 1 min.
5. Operating Force: 306~612gf
6. Travel: 0.7mm ±0.3mm
7. Bounce: 10ms
8. Life: 1,000,000 cycles

### OUTPUT CIRCUIT



### LOGIC PATTERN

(Clockwise rotation viewed from front) ←  
Detent Position



### ORDERING INSTRUCTIONS

## EC251X050XX

#### Shaft style:

- E = Single shaft
- F = Dual concentric shaft

#### Termination options:

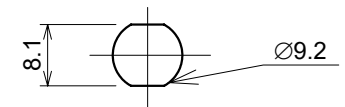
- A = Solder holes
- B = Connector
- C = Cable
- D = PC board mount

#### Jumper:

- 1 = With JMP1
- 2 = Without JMP1

### CUT-OUT DIMENSIONS

Mounting Panel Thickness:  
1.6~2.0mm



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DRAWN BY J RH	UPDATED 02/24/2021	CHECKED 02/24/2021	UNIT MM
PART NO. <b>EC251X050XX</b>			REV. <b>C</b>

