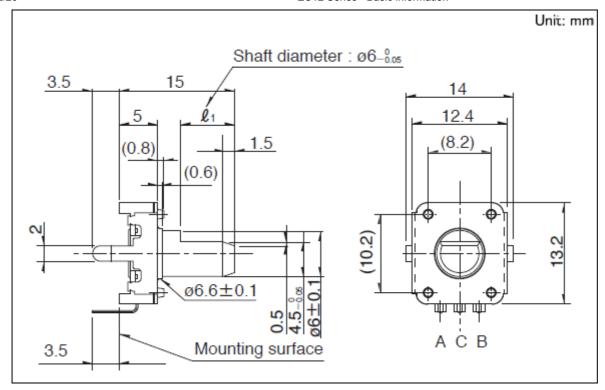


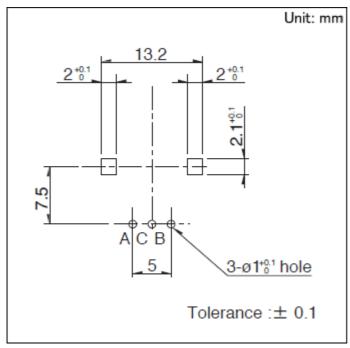
# 12mm Size Insulated Shaft Type EC12 Series

Standard Type		
Actuator length		15mm
Torque		Standard 3 to 20mN⋅m
Number of detent		24
Number of pulse		24
Operating direction		Vertical
Operating temperature range		-10℃ to +70℃
Electrical performance	Ratings	0.5mA 5V DC
	Output signal	Two phase A and B
	Max./min. operating current(Resistive load)	5mA/0.5mA
	Insulation resistance	10MΩ min. 50V DC
	Voltage proof	50V AC for 1 minute
Mechanical performance	Detent torque	3 to 20mN·m
	Push-pull strength	80N
Durability	Operating life	30,000 cycles
Minimum order unit (pcs.)	Japan	2,400
	Export	2,400

# **Dimensions**

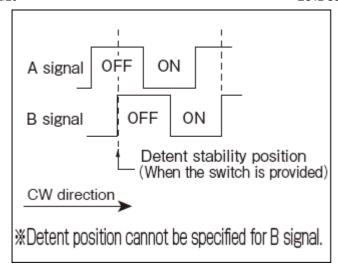


# Mounting Hole Dimensions

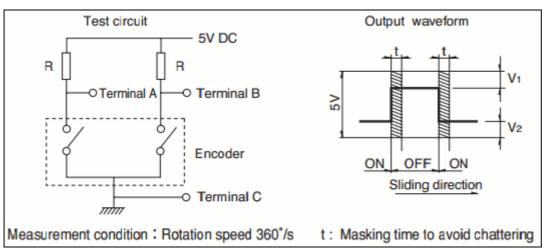


Viewed from mounting face.

# **Output Wave**



# Sliding Noise



V1 = V2 = 1.5V max.

At  $R=10k\Omega$  Chattering: 3ms max. Bounce: 2ms max.

#### **Packing Specifications**

#### Tray

Number of packages (pcs.)	s 1 case / Japan	2,400
	1 case / export packing	2,400
Export package measurements (mm)		525×369×204

# **Soldering Conditions**

#### **Reference for Dip Soldering**

Preheating	Soldering surfacetemperature	100℃ max.
	Heating time	1 min. max.
Dip soldering	Soldering temperature	260±5℃
	Soldering time	3±1s

No. of solders 2 time max.

Reference for Hand Soldering	
Tip temperature	350℃ max.
Soldering time	3s max.
No. of solders	1 time

#### Notes are common to this series/models.

- 1. This site catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders per minimum order unit (integer).
- 3. Products other than those listed in the above chart are also available. Please contact us for details.
- 4. Nuts and washers are not included. If required, please contact us.
- 5. This products can be used in vehicles. (EC12D only)
  Although these products are designed to perform over a wide operating temperature range, please ensure that you receive and read the formal delivery specifications before use.