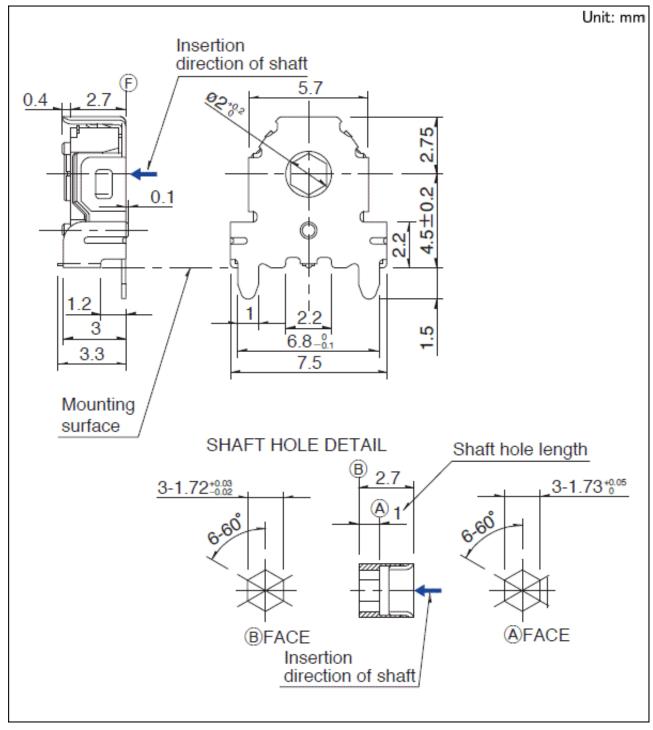


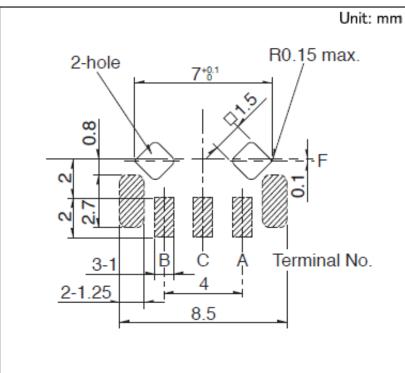
# 5mm Size Hollow Shaft Type EC05E Series

Number of detent		12
Number of pulse		12
Operating direction		Horizontal
Mount height		4.5mm
Operating temperature range		-30℃ to +85℃
Electrical performance	Ratings	0.55mA 5.5V DC
	Output signal	Two phase A and B
	Max./min. operating current(Resistive load)	0.55mA/-
	Insulation resistance	50MΩ min. 50V DC
	Voltage proof	50V AC for 1 minute
Mechanical performance	Detent torque	1.6±1.3mN·m
Durability	Operating life	100,000 cycles
Minimum order unit (pcs.)	Japan	4,000
	Export	8,000

## Dimensions

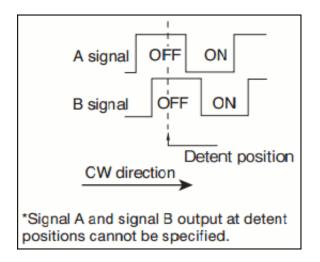


## Land Dimensions

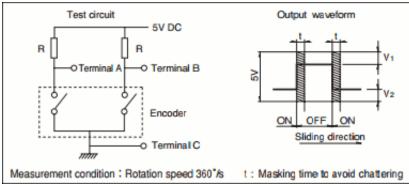


Viewed from mounting side, shaded area indicated soldering land.

## Output Wave



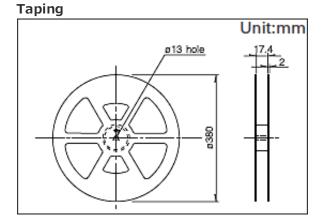
# Sliding Noise



V1=V2=2.5V max.

At R =  $10k\Omega$  Chattering : 6ms max. Bounce : 6ms max.

# Packing Specifications



Number of packages (pcs.)	1卷	1,000
	1 case / Japan	4,000
	1 case / export packing	8,000
Tape width (mm)		16
Export package measurements (mm)		410×485×246

# Soldering Conditions

#### Example of Reflow Soldering Condition

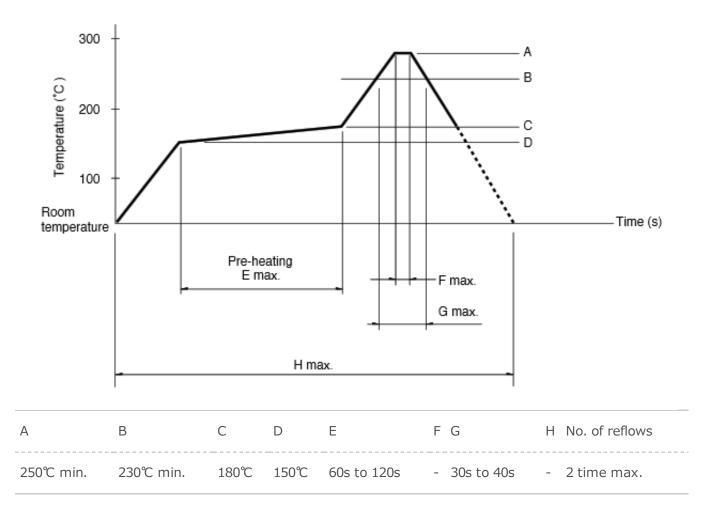
1. Heating method

Double heating method with infrared heater.

2. Temperature measurement

Thermocouple 0.1 to 0.2  $\Phi$  CA (K) or CC (T) at soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.

3. Temperature profile



(1)When using an infrared reflow oven, solder may sometimes not be applied. Be sure to use a hot air reflow oven or a type that uses infrared rays in combination with hot air.

(2)The temperatures given above are the maximum temperatures at the terminals of the potentiometer when employing a hot air reflow method. The temperature of the PC board and the surface temperature of the potentiometer may vary greatly depending on the PC board material, its size and thickness. Ensure that the surface temperature of the potentiometer does not rise to 250°C or greater.

(3)Conditions vary to some extent depending on the type of reflow bath used. Be sure to give due consideration to this prior to use.

#### **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 for taping products per minimum package units (1 reel or a case). Please see taping specifications.