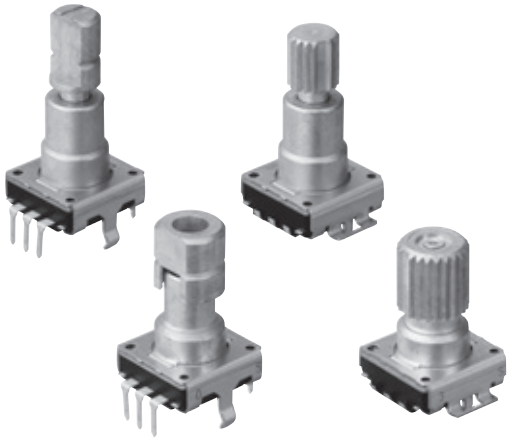
11mm Square GS Encoders G2

Type: EVED (Wave Soldering Type)
EVEE (Reflow Type)



■Features

- New minimized shaft wobble structure is applied
- Achieve a wide variety of feeling
- The reflow type allows the product to be automatically mounted and reflow-soldered

■Recommended Applications

- Control of volume and menu for Car audio
- Control of temp. and menu for Car air conditioners

■Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	V	E									
Product Code			Mounting method	Specifications (SW, Torque)		Shaft shape	Product height		Output or Packing		

4th	Mounting method
D	Wave Soldering Type
E	Reflow Type

7th	Shaft shape
A	Serration (Minimized Shaft Wobble Type)
B	F cut (Minimized Shaft Wobble Type)
G	Serration
P	F cut

10th,11th,12th	Output or Packing
08B	8 pulses, Tray packing
15B	15 pulses, Tray packing

■Specifications

		EVED (Wave Soldering Type)	EVEE (Reflow Type)	EVED (Minimized Shaft Wobble Wave Soldering Type)	EVEE (Minimized Shaft Wobble Reflow Type)
Mechanical	Rotation Angle	360° (Endless)			
	Shaft Pull/Push Strength	100 N min.			
	Shaft Wobble (* L : Measurement point)	0.2×L/20 (mm) max.		0.15×L/20 (mm) max.	
	Rotation Torque	8mN·m, 12mN·m, 14mN·m			
	Detents	16 points, 30 points, Without points			
	Shaft Length	L1=22.5mm, 25mm		L1=18mm, 20mm	
Electrical	Output Signals	Phase A and B			
	Resolution	8, 15 pulses/360°			
	Rating	1mA 10V DC (at each bit)			
	Contact Resistance	1Ω max.			
	Chattering	3ms max.			
	Insulation Resistance	50MΩ min. (at 250V DC)			
	Dielectric Withstanding Voltage	300V AC for 1 minute			
	Bouncing	5ms max.			
Switch Part	Type	SPST Push-on			
	Rating	20mA 16V DC			
	Contact Resistance	100mΩ max.			
	Operating Force	0.4mm travel type : 4N, 6N			
		1.5mm travel type : 4N, 5N			
	Travel	0.4mm, 1.5mm			
Endurance	Rotation life (Encoder)	30,000 cycles min.			
	Operating Life (Switch)	30,000 cycles min.			
Minimum Quantity/Packing Unit		100 pcs. (Tray Pack)	50 pcs. (Tray Pack)	100 pcs. (Tray Pack)	50 pcs. (Tray Pack)
Quantity/Carton		500 pcs.	250 pcs.	500 pcs.	250 pcs.

Sometimes, It needs some times before starting mass-production depending on the combination of the above specification. Please contact us in advance when you study to use our production.
Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
Should a safety concern arise regarding this product, please be sure to contact us immediately.

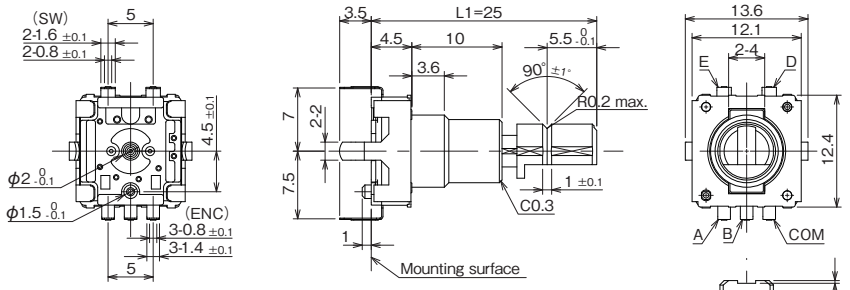
■Dimensions in mm (not to scale)

No. 1

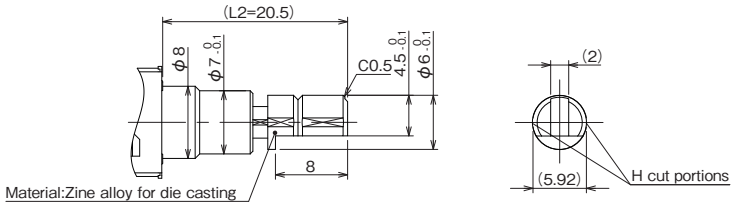
EVED

(Wave Soldering Type)

General dimension tolerance : ± 0.5
( )dimensions are reference dimensions.



Shaft shape and dimension

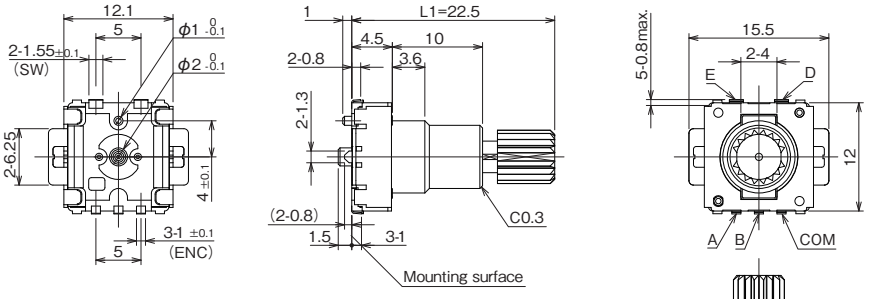


No. 2

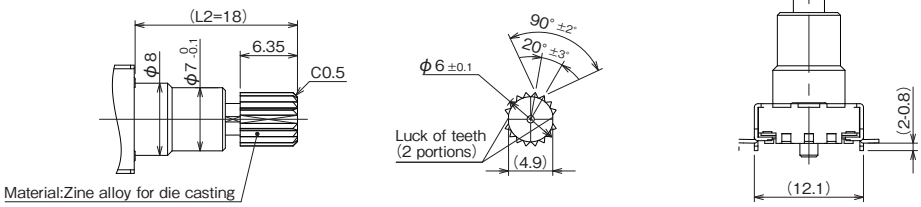
EVEE

(Reflow Type)

General dimension tolerance : ± 0.5
( )dimensions are reference dimensions.



Shaft shape and dimension

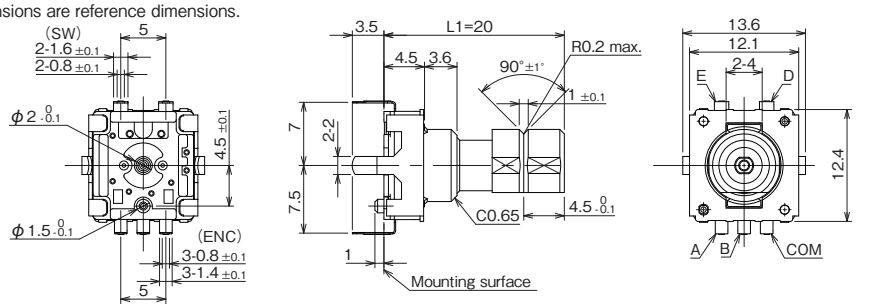


No. 3

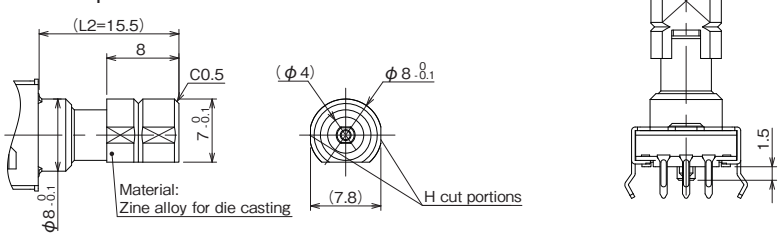
EVED

(Minimized Shaft Wobble
Wave Soldering Type)

General dimension tolerance : ± 0.5
( )dimensions are reference dimensions.



Shaft shape and dimension

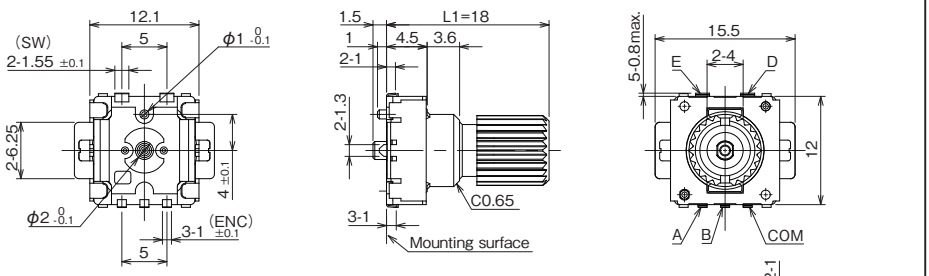


No. 4

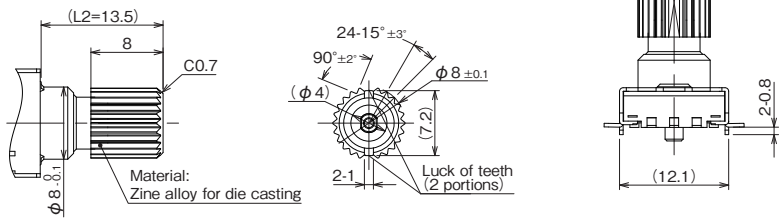
EVEE

(Minimized Shaft Wobble Reflow type)

General dimension tolerance : ± 0.5
( )dimensions are reference dimensions.

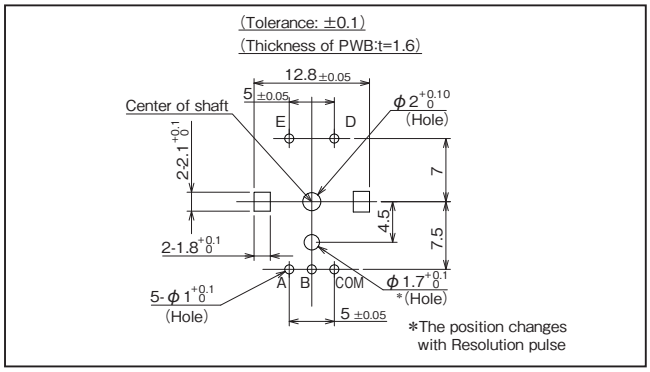


Shaft shape and dimension

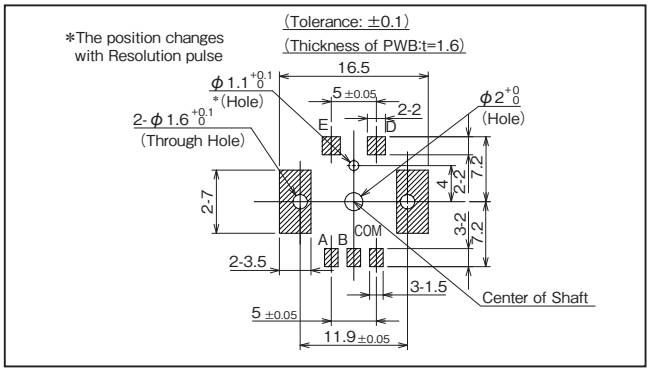


■PWB mounting hole for reference (View from mounting side)

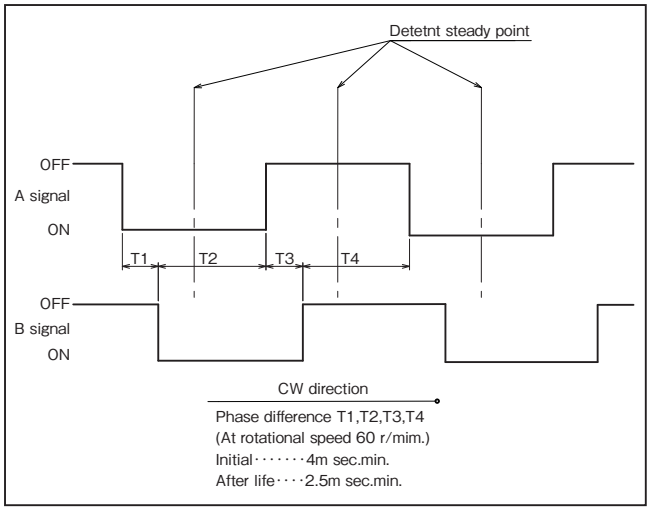
●Wave Soldering Type



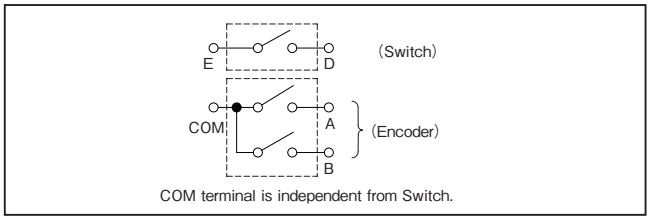
●Reflow Type



■Phase Difference



■Encoder/Switch Circuit



■Test Circuit Diagram