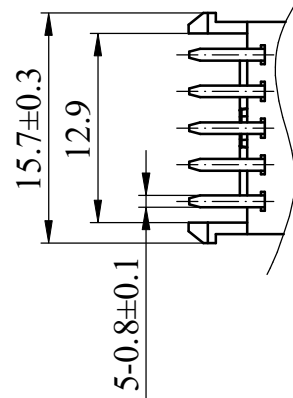
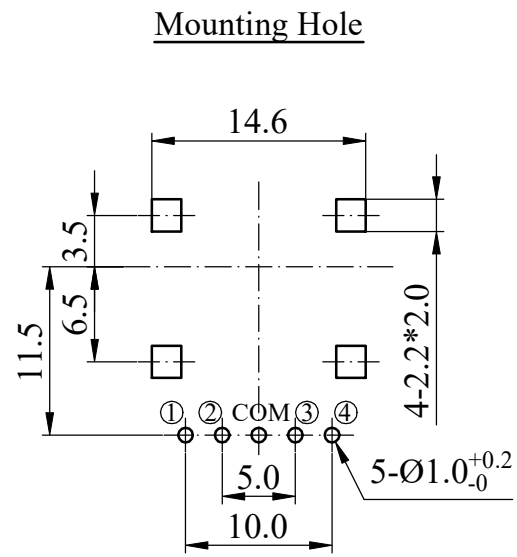
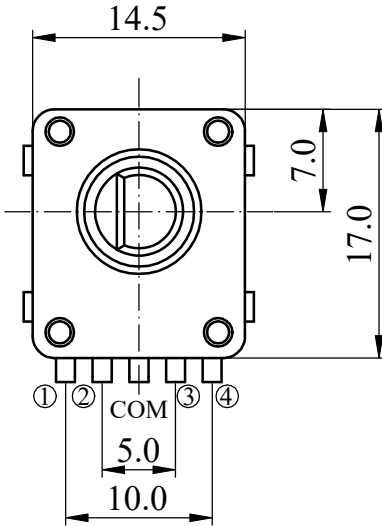
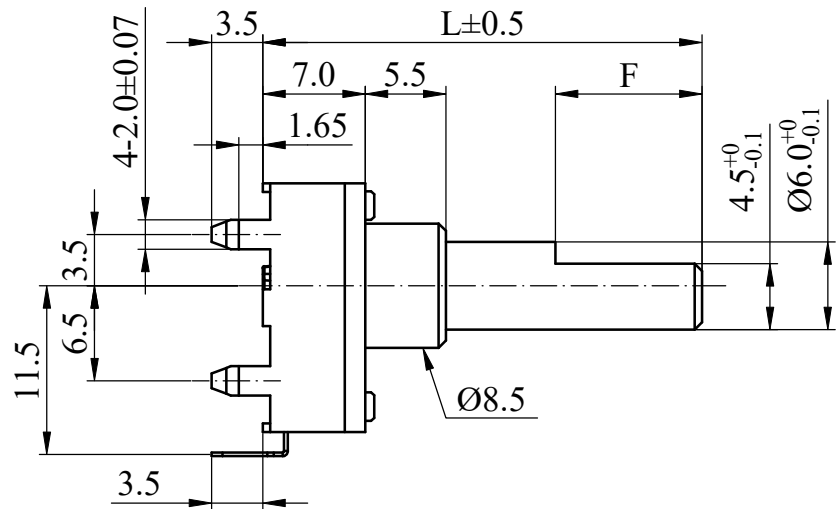




ISO 9001 國際品質認證  
ISO 9001 CERTIFICATE

松暉電機工業股份有限公司  
SONG HUEI ELECTRIC CO., LTD.  
佛山市松暉電機科技有限公司  
FOSHAN SONG HUEI ELECTRIC CO., LTD.

一般事項 General	
使用溫度範圍 Operating temperature	-10 °C ~ 70 °C
儲存溫度 Storage temperature	-40 °C ~ 85 °C
電氣特性 Electrical Characteristics	
額定功率 Power rating	DC 5 V 1 mA
絕緣阻抗 Insulation resistance	10 MΩ at DC 50 V
耐電壓 Withstand voltage	For 1 minute or more ( at AC 50 V )
代碼 Code	(詳見成品圖) (Refer to attached drawing)
機械特性 Mechanical Characteristics	
全回力矩 Rotational torque	50 ~ 350 gf.cm
軸推拉強度 Shaft push-pull strength	5Kgf.max
止檔強度 Stopper strength	5Kgf.cm max
端子強度 Terminal strength	在端子的先端施加3N (300g) 的力1分鐘。 A static load of 3N (300g) be applied to the tip of terminals for 1 minute in any direction.
定位點數及位置 Detent number and position	11 detents ( Step angle: 30 ° ± 5 ° )
軸向間隙 Shaft play in axial direction	0.4 mm max
軸擺動 Shaft wobble	0.8 * L / 30 mm p-p 以下 ( L: 指安裝平面到軸的柄端的距離 ) 0.8 * L / 30 mm p-p Max L: Distance between mounting surface and the top of the shaft.
軸的回轉方向摆动 Shaft play in rotational wobble	5° 以下 5° Max
回轉壽命 Rotational life	30,000 cycles at a speed of 600 cycles / per hour 每小時 600 圈的速度測試
焊錫耐熱性 Resistance to soldering heat	手焊: 350 °C 以下, 3 秒以內。自動或半自動機台焊錫條件: 預熱: 基板表面溫度 100 °C 以下, 時間 1 分以內, 過錫爐: 260 ± 5 °C 3 秒 ± 0.5 秒。 Manual soldering: less than 350 °C and within 3 seconds. For automated or semi-automated soldering equipments: Preheating: surface temperature of board: less than 100 °C and within 1 min. Auto soldering: 260 ± 5 °C for 3S ± 0.5seconds.



SHAFT SHOWN IN FULL CC.W POSITION

CIRCUIT

C.W →

POS	1	2	3	4	5	6	7	8	9	10	11
①	○	●	●	●	○	○	○	○	○	○	○
②	●	●	●	○	○	●	●	●	○	○	○
③	○	○	●	●	●	●	○	○	○	●	○
④	○	○	○	○	○	○	●	●	●	●	○

● : ON  
○ : OFF

				Non notation tolerance	
L=	30			< 10	±0.3
F=	10			10 ~ 100	±0.5
choose				> 100	±0.8

**S**® SONG HUEI ELECTRIC CO., LTD.  
FOSHAN SONG HUEI ELECTRIC CO., LTD.

MODEL: ES1412-11(F)/PH/0496

Approval  
R&D  
2022-12-06  
藍濬毅

Checked  
廠長  
2022-12-06  
鄧記穩

Drawn  
R&D  
2022-12-06  
何鴻根

UNIT	mm	SCALE	2:1
VERSION	1.0	DATE	2022.12.06
DRAWING NO.	ED-124		

ISSUE	SUBJECT	NAME	DATE
RECORD			