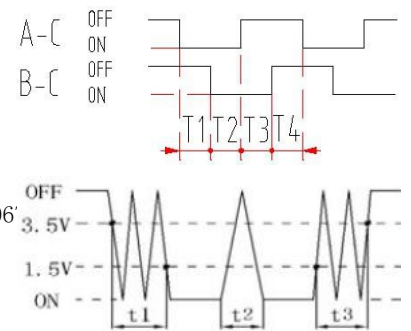
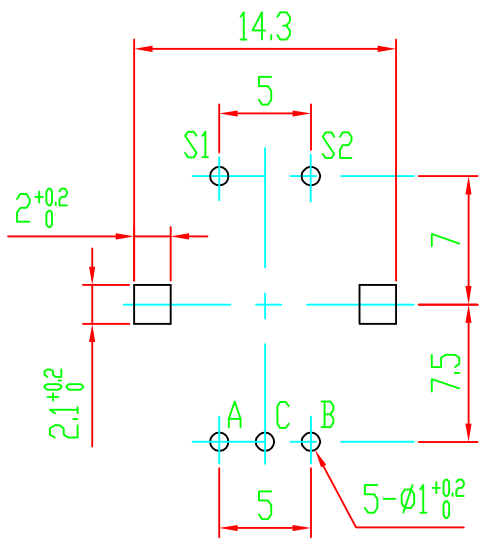
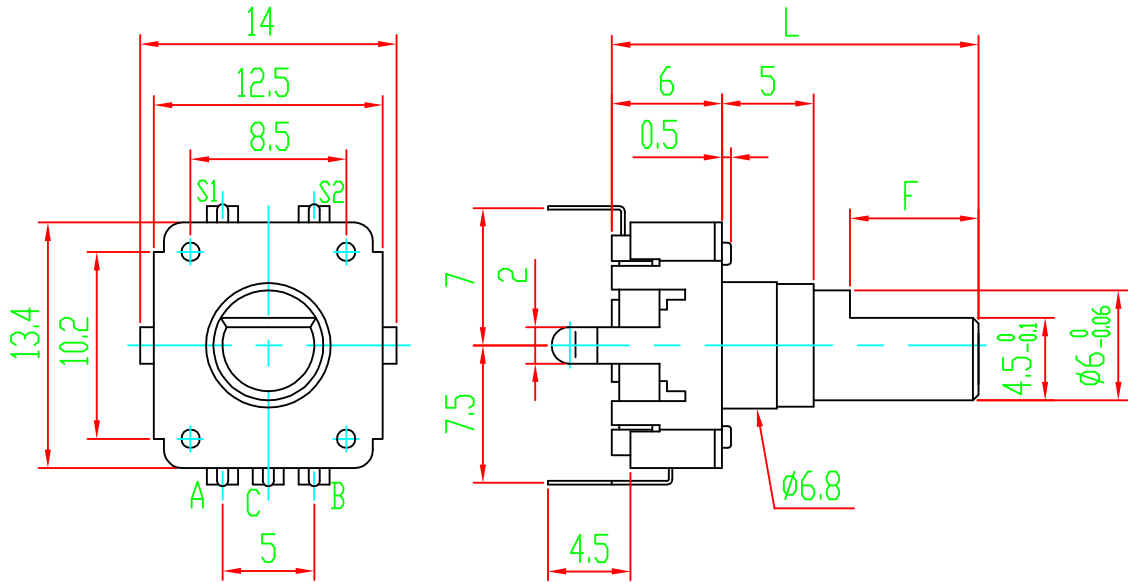


## EC12 Series Specification

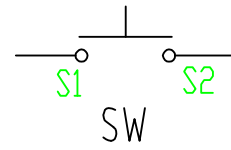
EC12E20-24P24C-SW	
Mechanical Characteristics	
ITEM	SPECIFICATION
Total Rotational Angle	360°
Rotational Torque	□ 20≈200gf.cm
Click pull-out Torque	□ 20≈150gf.cm
Shaft push-pull Strength	8.0kgf-8.0kgf Min at 8sec
Shaft Wobble Strength	0.7xL/30 mm P-P max L:shaft length
Number of Click	■ 24 clicks Step Angle:15° ±2°
Bushing-nut tightening strength	7.0kgf.cm Min
Shaft rotational gap	0.4mm Max
Shaft play in rotational wobble	5° Max
Electrical Characteristics	
ITEM	SPECIFICATION
Power rated	DC 5V, A、B lead 5mA Max, C lead 10mA Max
Output signal	A、B 2 signals
Resolution	■ 24 pulses/360°
Contact resistance between pins	1 Ω Max
Phase difference	T1、T2、T3、T4≥0.06°
Rotation noise	t1, t3≤3mS t2≤2mS
Insulation resistance	100MΩMin at DC 250V
Dielectric	1 minute at AC 300V
Endurance characteristics	
ITEM	SPECIFICATION
Rotational life	□ 30,000±200 cycles ≤100gf.cm □ 15,000±200 cycles ≥100gf.cm
Storage temperature range	-40°C≈+85°C
Operating temperature range	-30°C≈+80°C
Soldering characteristic	dipping in soldering≤206°C±5° , within 3S solder by hand:≤300°C±5° , within 3S



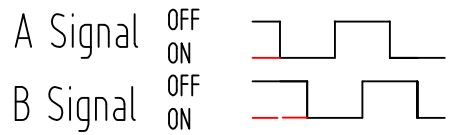
Shaft Shown in Full  
C.C.W. Position



P.C.B MOUNTING DETAIL



CW →



← CCW

L	20 ✓	22.5	25
F	7 ✓	7	12

02				05				
01				04				
	DATE	REVISION	APPROVED	03				
			MODEL: EC12E20-24P24C-SW				DRAWING NO:	
2016.12.10	2016.12.10	2016.12.10	<b>SRPASSIVES</b>					
DRAW	CHKD	APPD						