

**PCB LAYOUT**

**Order Information:**

L-KLS4-EC1203 - C XX-XXX

Shaft type and Length Code

Pulse and Detent Code

- 6A: 12 Pulse with 12 Detents
- 6B: 12 Pulse without Detent
- 8A: 24 Pulse with 24 Detents
- 8B: 24 Pulse without Detent

<input checked="" type="checkbox"/>	C
<input type="checkbox"/>	D
<input type="checkbox"/>	7

ROHS  
12mm Encoder

Bushing:

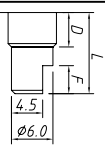
**Electrical Characteristics**

- Rated Power: DC5V 5mA Max.
- Output signal: A \ B 2signals
- Resolution: 12 Pulses 360° / 24 Pulses 360°
- Phase difference: 0.08T Min.
- Sliding noise: 3mS Max.
- Contact Resistance: 1Ω Max.
- Insulation resistance: 100MΩ Min. at DC 250V
- Withstand voltage: AC300V / 1min

**Mechanical**

- Total rotation angle: 360°
- Rotational Torque: 1kgf.cm Max
- Click Torque: 20~150 gf.cm
- Push-pull Strength of Shaft: 80kgf Min.
- Number of Detents: 12 detents Step angle: 30°±2°  
24 detents Step angle: 15°±2°  
Without detents
- Rotational Life: 30000±200 cycles per 100gf.cm Min.
- Temp. Range: -30 ° C ~ + 85 ° C
- Soldering: 250 ° C 5Sec. Max.

Shaft type		D=7		
L	14.5	20.7	24	
F Shaft	F	7	12	16.5



GENERAL TOLERANCE	ANGLE TOLERANCE	PROJECTION	Description:
X. ±0.50	X. ±5°	UNITS	12MM Encoder Metal shaft
.X ±0.38	.X ±3°	SHEET SIZE	
.XX ±0.25	.XX ±2°	KLS P/N:	

KLS4-EC1203-CXX-XXX

Draw by: Date	2015-09-01
Check by: Date	2015-09-15
SCALE	SHEET OF

**KLS ELECTRONIC CO., LTD.**