



PCB LAYOUT

Electrical Characteristics
 Rated Power: DC5V 5mA Max.
 Output signal: A \ B 2signals
 Resolution: 15 Pulses 360°
 20 Pulses 360°
 9 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: 20~200 gf.cm Max
 Click Torque: 20~150 gf.cm
 Push-pull Strength of Shaft: 8.0kgf Min.
 Number of Detents: 30 detents Step angle: 12°±2°
 20 detents Step angle: 18°±2°
 18 detents Step angle: 20°±2°
 Without detents

Rotational Life: 30000±200 cycles per 100gf.cm Min.
 Temp. Range: -30 °C ~ +80 °C
 Soldering: 250 °C 3Sec. Max.

Order Information:
 L-KLS4-EC1107 S - E XX-XX
 RoHS 1mm Encoder
 Switch: S- with switch
 Bushing:

<input checked="" type="checkbox"/>	E		
<input type="checkbox"/>	D	S	

Shaft type and Length Code
 Pulse and Detent Code
 5A: 15 Pulse with 30 Detents
 5B: 15 Pulse without Detent
 4A: 20 Pulse with 20 Detents
 4B: 20 Pulse without Detent
 3A: 9 Pulse with 18 Detents
 3B: 9 Pulse without Detents

Shaft type		D=5	
L	9.5		
F	1.6		
T Shaft		D=5	
L	10		
F	4		
F Shaft		D=5	
L	15		
F	7		

GENERAL TOLERANCE		ANGLE TOLERANCE		PROJECTION		Description:	
X	±0.50	X	±5°	UNIT	mm	11MM SMD Encoder with Switch	
X	±0.38	X	±3°	SHEET SIZE	A4		
XX	±0.25	XX	±2°	KLS P/N	KLS4-EC1107S-EXX-XX		
Draw by: Date		2017-09-01					
Check by: Date		2017-09-05					
SCALE		SHEET	OF				

KLS ELECTRONIC CO., LTD.