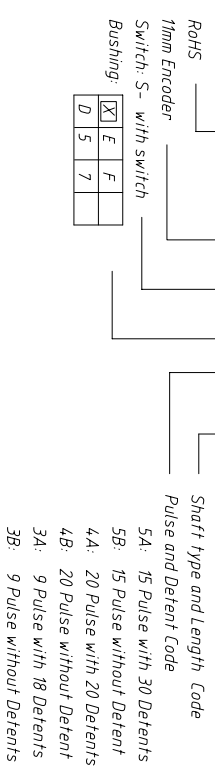


PCB LAYOUT

Shaft type	D=5					D=7					
	L	13	17.5	12	13.3	14	16.7	17	20.5	22	25.5
Q Shaft	F	5	6	3.5	5	5	5	7	11	11	5
AB Shaft	L	10	12.5	13.5	15.5	16.7	12.5	13	14.5	15	17
	F	4	6	5	5	7	4.5	4	5.5	5	7
T Shaft	L	9.5	11	11.5	12.5	13	15.3	12.5	13.5	14	15
	F	3.5	3.5	5	5	5	7.8	4	4	5	7
F Shaft	L	10	10.5	12.5	13	16.7	13	14	15.5	16.6	17.1
	F	4	4	5	7	7	4	5	7	7	7

GENERAL TOLERANCE		ANGLE TOLERANCE		PROJECTION		Description:	
X	±0.50	X	±5°	mm	mm	11MM SMD Encoder with Switch	
X	±0.38	X	±3°	A4	A4	KLS P/N: KLS4-ECT1065-EXX-XX	
XX	±0.25	XX	±2°	SHEET SIZE		KLS4-ECT1065-EXX-XX	
Draw by: Date		2017-09-01		KLS ELECTRONIC CO., LTD.			
Check by: Date		2017-09-05					
SCALE		SHEET	OF				



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-ECT106 S - E XX- XX
 RoHS
 11mm Encoder
 Switch: S- with switch
 Bushing:

<input checked="" type="checkbox"/>	E	F
D	5	7

 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