



PCB LAYOUT

Shaft type						
F Shaft	L	17.5	20	22.5	25	30
	F	5	7	7	12	10

T Shaft							
L	L	15	17.5	20	22.5	25	30
	F	2.5	5	7	7	12	12

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: 8.0kgf 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.

Order Information:
 L-KLS4-EC1209 S - 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

RoHS
 12mm Encoder
 Switch: S- with switch

GENERAL TOLERANCE		ANGLE TOLERANCE		PROJECTION		Description:		
X. ±0.50	X. ±3°	X. ±5°	X. ±3°	mm	mm	12MM Encoder Metal		
.X ±0.38	.XX ±2°			SHEET SIZE	A4	shaft, with Switch, Right angle		
.XX ±0.25				KLS P/N:		KLS4-EC1209S-XX-XXX		
Draw by: Date	2015-09-01							
Check by: Date	2015-09-15							
SCALE	SHEET	OF						

KLS ELECTRONIC CO., LTD.