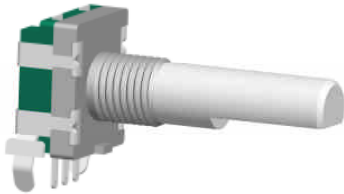




SONG HUEI ELECTRIC CO.,LTD

11mm Rotary type Encoders

ED1111



Part Number

ED1111 – 20P – 20C – 25 F

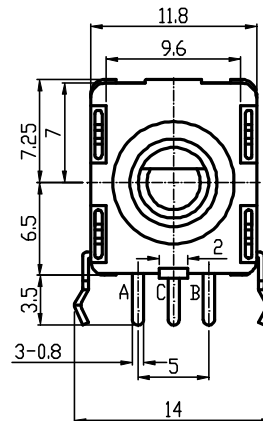
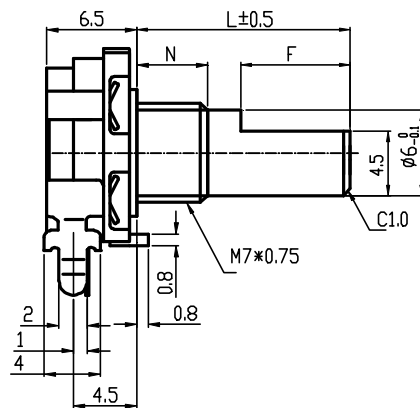
Pulses

Clicks

Shaft length

Shaft typ

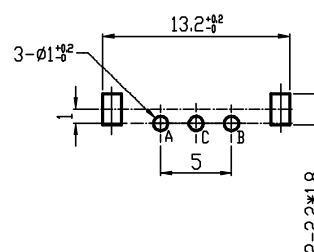
Dimensions



CIRCUIT

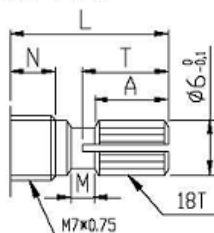


P.C.B LAYOUT



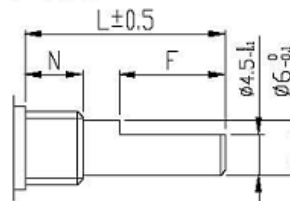
Shaft Type

KC-TYPE



N	5	7			
L	10	12	15	20	30
T	25	5	7	12	14
A	2	4	6	10	12
M	0.5	1	1	2	4

F-TYPE

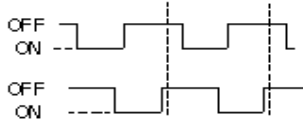


N	5	7	
L	15	20	25
F	7	10	12



11mm Rotary type Encoders

1.Electrical Characteristics

Power Rating	DC 5V 0.5mA
Insulation Resistance	More than 10 MΩ at DC 250V 1 Minute
Withstand Voltage	1 Minute at AC 50V
Sliding Noise	$t_1, t_3 \leq 3\text{ms}$ (Test conditions: $360^\circ/\text{S}$); $t_2 \leq 2\text{ms}$ Using the C/R filter circuit is Recommended
Resolution	20 Pulses/ 360° for each phase .
Phase Difference	$\Delta T = 0.25 \pm 0.17T$
Output Signal And Rotational Direction	<div style="display: flex; align-items: center;"><div style="margin-right: 20px;">C.C.W direction</div><div style="text-align: center;"><div>A Signal</div><div>B Signal</div></div><div style="margin-left: 20px;"></div></div>
Working Temperature	$-10^\circ\text{C} \sim 70^\circ\text{C}$
Storage Temperature	$-40^\circ\text{C} \sim 85^\circ\text{C}$

2.Mechanical Characteristics

Total Rotational Angle	360°
Rotational Torque	30~200 gf.cm ※(Shaft Rotatable at $-10^\circ\text{C} \sim +5^\circ\text{C}$)
Shaft Push-Pull Strength	5.1 Kgf.cm
Number and Position Detent	<ul style="list-style-type: none">• 20 detents (Step angle: $18^\circ \pm 3^\circ$)• 0 detents (Step angle: 360°)
Shaft Play in Axial Direction	0.4mm Max.
Rotational Life	30,000 Cycles Min. at a speed of 600 cycles/H
Resistance To soldering Heat	Manual Soldering: Less than 300°C and quicker than 3 seconds. Auto soldering: $260 \pm 5^\circ\text{C}$ 3~5 seconds.