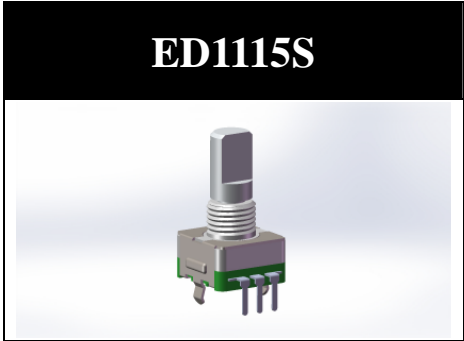


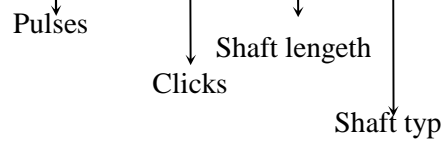


11mm Metal Shaft Rotary Encoder With Push-On Switch

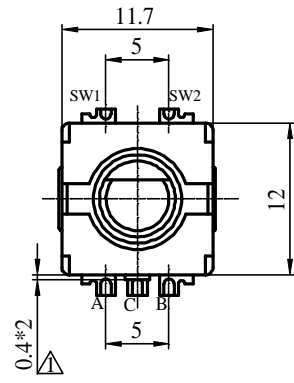
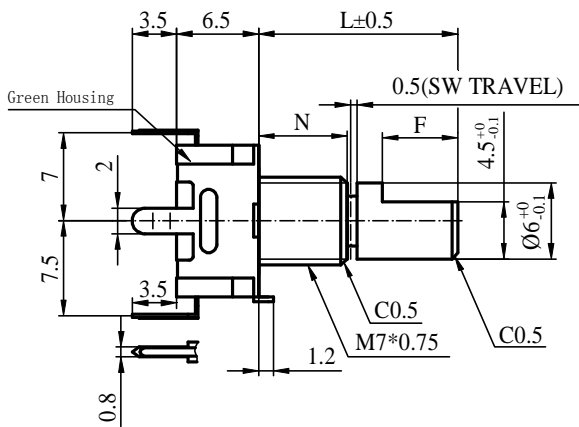


Part Number

ED115S - 20P - 20C - 25 F

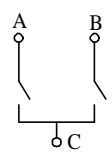


Dimensions

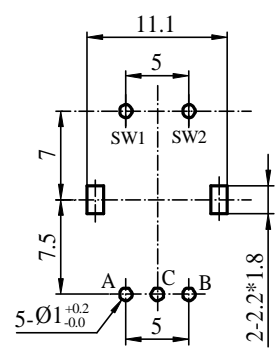
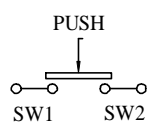


Mounting Hole

CIRCUIT

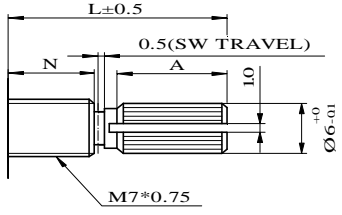


SWITCH



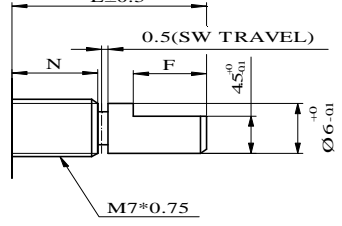
Shaft Type

KC-TYPE



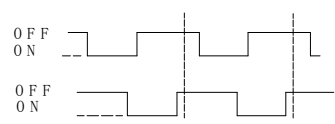
N	5	7
L	15	20
A	7	10

F-TYPE



N	5	7		
L	11	15	17.5	20
F	4	5	10	10
			12	

**11mm Metal Shaft Rotary Encoder With Push-On Switch****1.Electrical Characteristics**

Power Rating	DC 5V 0.5mA
Insulation Resistance	$\geq 100M\Omega$ at 300V DC
Withstand Voltage	For 1 minute or more (at 300V AC)
Sliding Noise	$t1, t3 \leq 3mS$ (Test conditions: $360^\circ/S$); $t2 \leq 2mS$ 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	C.C.W direction A Signal B Signal 
Working Temperature	$-10^\circ C \sim 70^\circ C$
Storage Temperature	$-40^\circ C \sim 85^\circ C$

2.Mechanical Characteristics

Total Rotational Angle	360°
Rotational Torque	30~200 gf.cm (Shaft Rotatable at $-10^\circ C \sim +5^\circ C$)
Shaft Push-Pull Strength	8 Kgf min
Number and Position Detent	<input type="checkbox"/> 20 detents (Step angle: $18^\circ \pm 3^\circ$) ; <input type="checkbox"/> 30 detents (Step angle: $12^\circ \pm 3^\circ$) <input type="checkbox"/> 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 $300^\circ C$ and quicker than 3 seconds. For Automated or Semi-Automated Soldering Equipments: Preheating: Surface temperature of board: $100^\circ C$ less . within 1 min . Auto soldering: $260 \pm 5^\circ C$ 3~5 seconds.