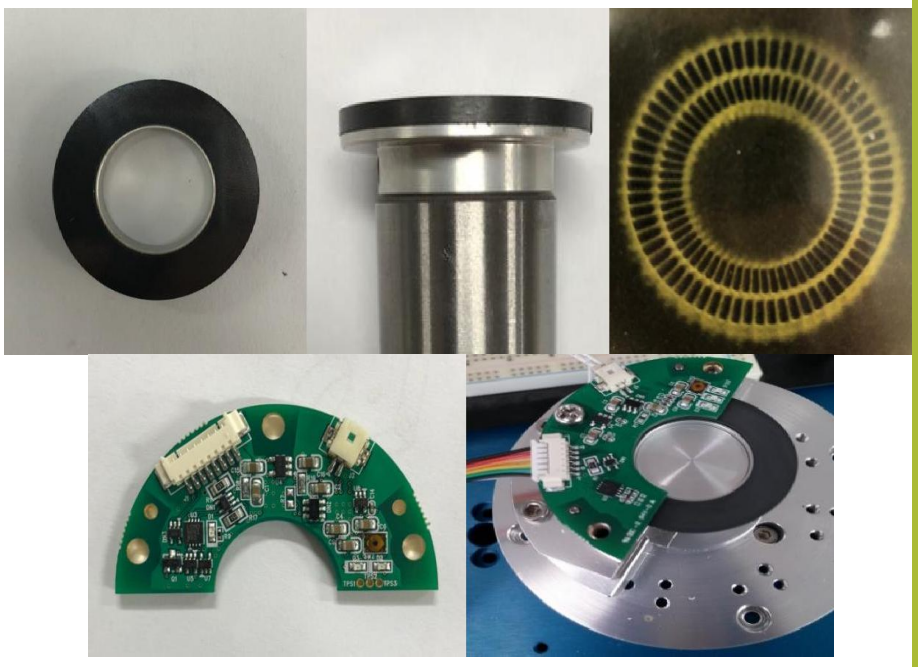
ROUNDSS R



RDE51T series

（Singleturn-19bit, Multiturn-16bit）

Absolute Magnetic Encoder

JAN, 2021

Changchun Rongde Optics Co.,Ltd.

RDE51T19-G1B-19/16

Specifications

Classification	Specification
Resolution	Singleturn-19bit, Multiturn-16bit
Main Supply Voltage	5V ± 10%
Main Supply Current	Max 6mA (Typ. 4mA)
Battery Supply Voltage	3 to 5.5V (Typ. 3.6V)
Battery Supply Current	Max 800μA (Typ. 10μA)
Sensing Method	Magnetic
Magnet pole	Master track – 32 pole pair Nonius track – 31 pole pair
Operating temperature	-10℃ to +110℃
Communication	BiSS – C Interface
PCB outline	Φ51 x 1.6 (mm)
Magnet outline	Φ34 ± 0.2 (mm)
Inner Diameter	Φ19 7 (mm)
Heigth	$7^{+0.02}_{-0.02}$
Magnet material	Ferrite
Flange material	Al6061 / Anodize white
Air Gap	Max 0.5mm

Pin Map

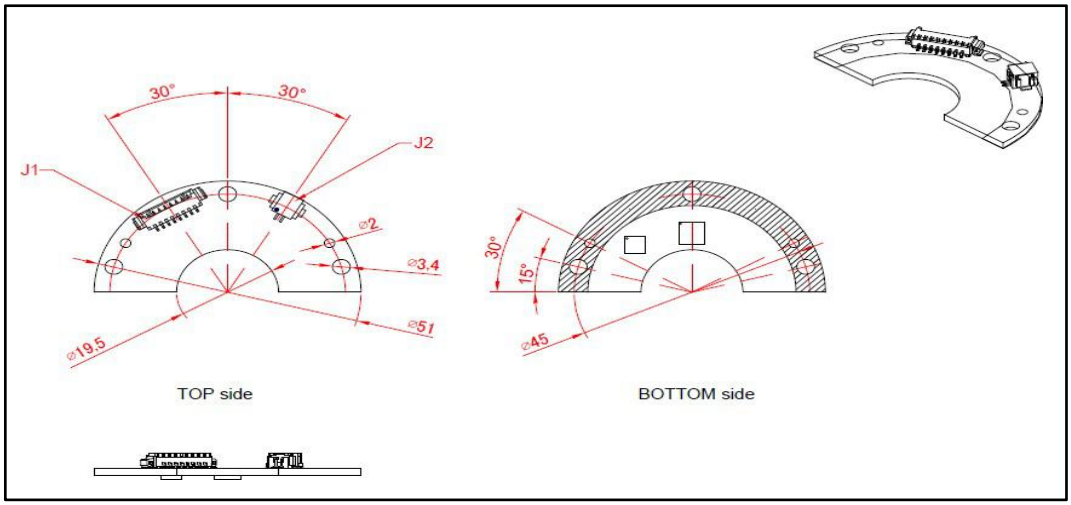
Number	Designation	Function
1	VCC	Power Supply Voltage(5V)
2	Data+	Data +differential signal from Encoder to Driver
3	Data-	Data -differential signal from Encoder to Driver
4	CLK+	Clock +differential signal from Driver to Encoder
5	CLK-	Clock -differential signal from Driver to Encoder
.6	GND	System ground
7	Output	PVL nWarning output (Open Drain Port)
8	Input	PVL Preinput (TTL input Port)

Battery Pin Map

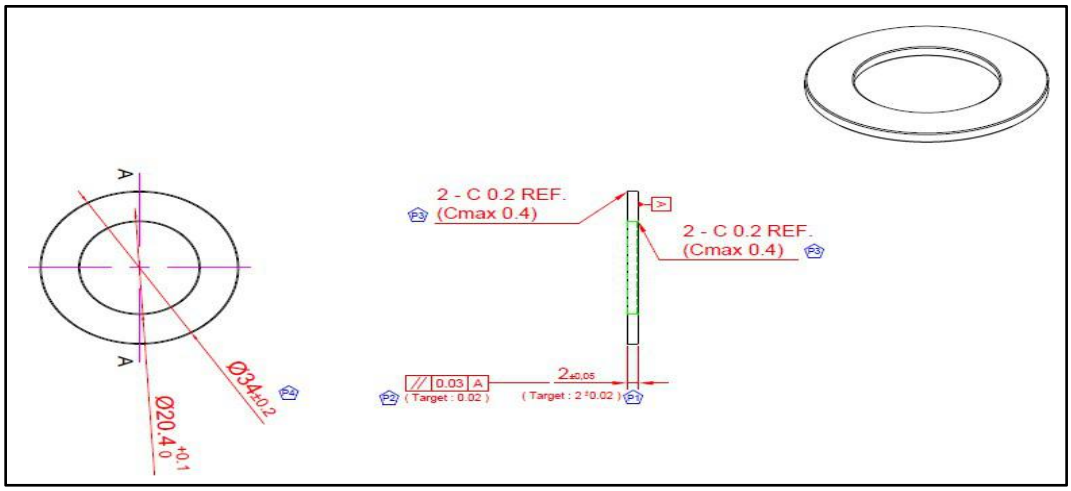
Number	Designation	Function
1	V_ Battery	Battery Supply Voltage(3.6V)
2	GND	Battery ground

Dimension

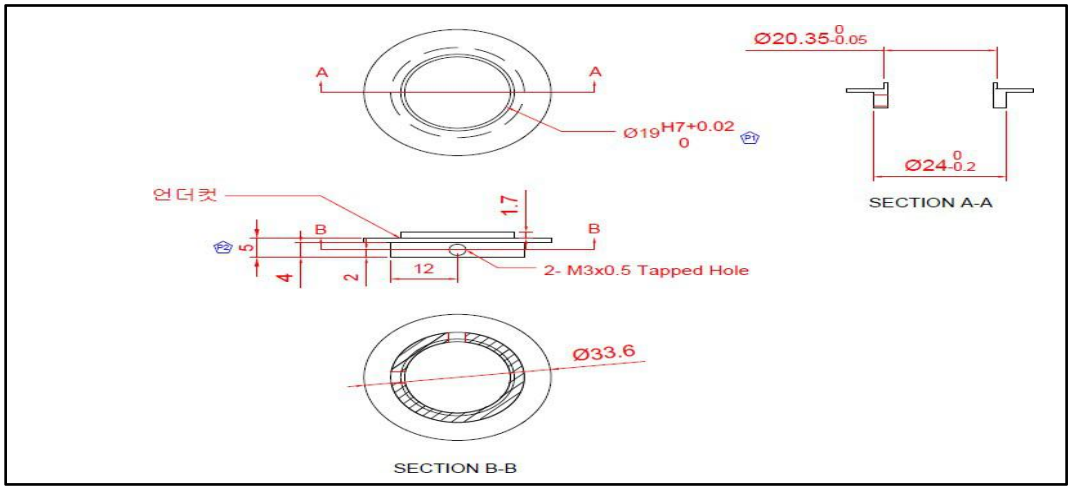
- PCB



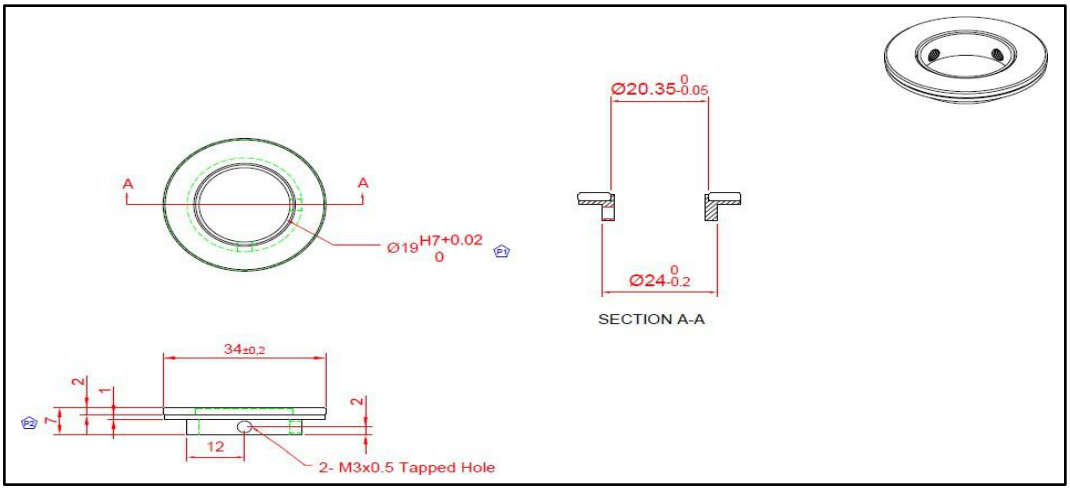
- Magnet



- Flange



- Code Wheel Ass'y



- PCB + Magnet Ass'y