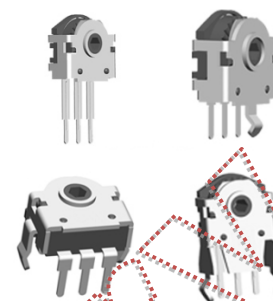


10 mm Encoder

EN10 Series



Features:

- Compact design
- 2 bits gray code
- Incremental/contacting type
- Plastic Hollow Shaft
- Vertical and Horizontal mount versions

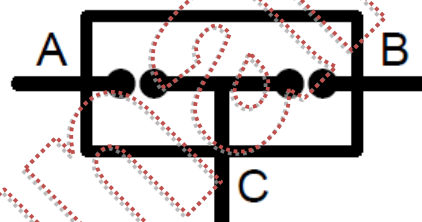


Description:

10 mm encoder is a small encoder which is a good fit for various small electronic applications such as frequency modulation, volume adjustment, and function switching.

Applications:

- Mice
- Earphones
- Radios
- Electronic toys



Electrical Characteristics

T_A = 25°C unless otherwise noted

Output	2 Bits Gray Code
Pulses (Per Revolution)	6, 12
Phase Difference	0.08T ± 0.1T
Power Rating	5 Vdc / 10 mA
Insulation Resistance	10MΩ 1 Minute at 50 Vdc Max.
Dielectric Strength	1 Minute at 50 Vac
Chattering	3 ms maximum
Bounce	2 ms maximum

Encoder Characteristics

T_A = 25°C unless otherwise noted

Rotation	360° continuous
Rotational Torque	15-50 gf.cm
Detents per Rotation	12, 24
Detent Torque	TBD gf.cm
Rotational Life	100,000 Cycles Min.

General Note

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Ph: + 1 (714) 447-2345
www.ttelectronics.com

Environmental Characteristics

TA = 25°C unless otherwise noted

Operating Temperature	-20°C to +80°C
IP Rating	IP 40
Soldering Condition	Wave/Reflow Soldering 260°C maximum for 1-3 seconds Hand Soldering 350°C maximum for 3 seconds
RoHS	Please refer to TT Electronics website
REACH	Please refer to TT Electronics website

Ordering

EN10	HT	12	12	N	5	HH2
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Part Family

Style

HT = Top Adjust, Double Tab Bracket

VT = Side Adjust, Double Tab Bracket

VTs = Side Adjust, Single Tab Bracket

VTN = Side Adjust, No Bracket

Pulses/360°

06 = 6 pulses

12 = 12 pulses

Detent/Rotation

$$12 = 12/360^\circ (6 \text{ or } 12 \text{ pulses})$$

~~24 = 24/360° (12 pulses only)~~

Switch Option

N = No Switch

Standoff Length

1 = 7 mm

2 = 9 mm

3 = 11 mm

4 = 13 mm

5 = 5.5 mm

6 = 6.4 mm (HT only)

Shaft Style

HH2 = Hollow Hex Shaft 1.72mm

HH3 = Hollow Hex Shaft 1.75mm

General Note

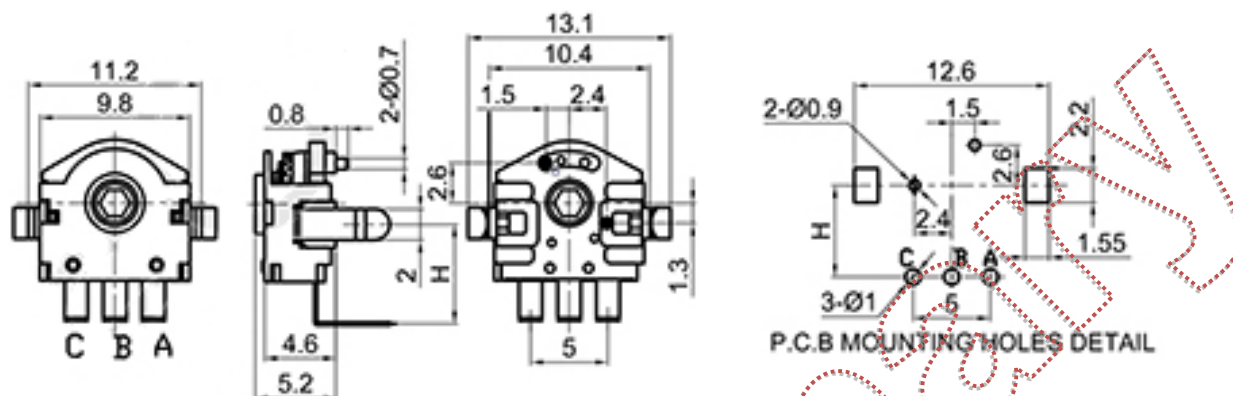
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Outline Drawings

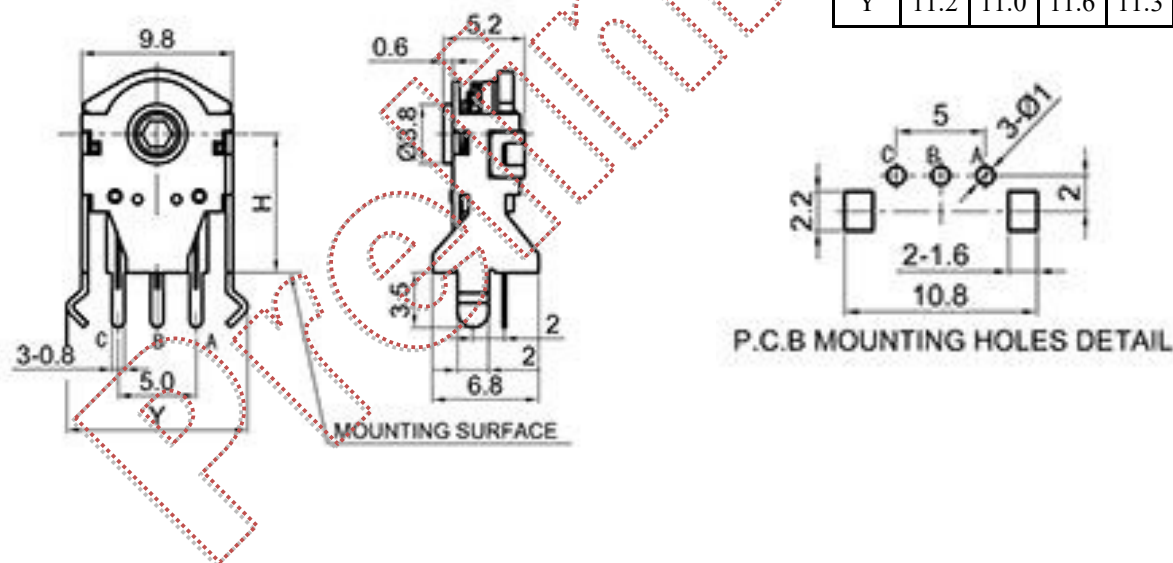
EN10HT - Top Adjust, Double Tab Bracket

X	5	6
H	5.5	6.4



EN10VT - Side Adjust, Double Tab Bracket

X	1	2	3	4
H	7	9	11	13
Y	11.2	11.0	11.6	11.3



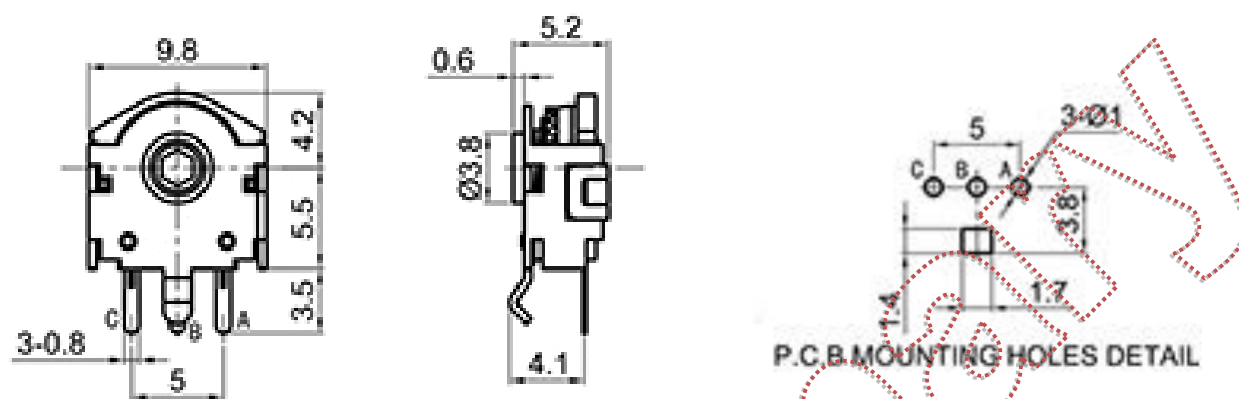
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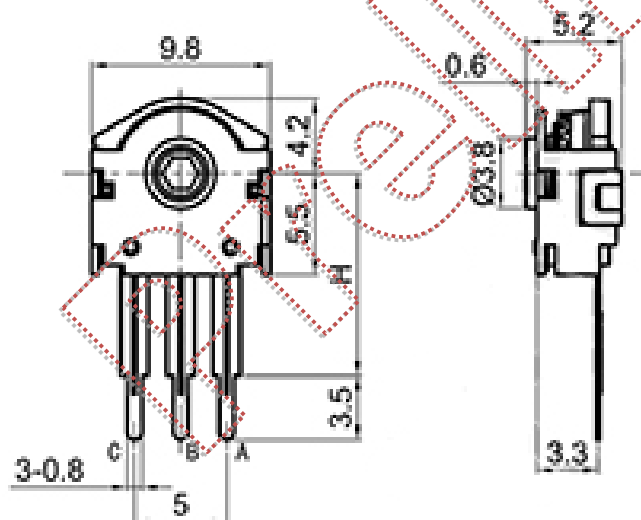
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Outline Drawings

EN10VTS - Side Adjust, Single Tab Bracket



EN10VTN - Side Adjust, No Bracket



X	1	2	3	4	5
H	7	9	11	13	5.5

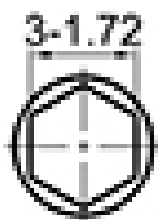
General Note

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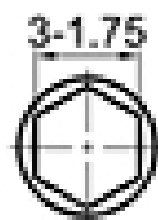
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Shaft Detail

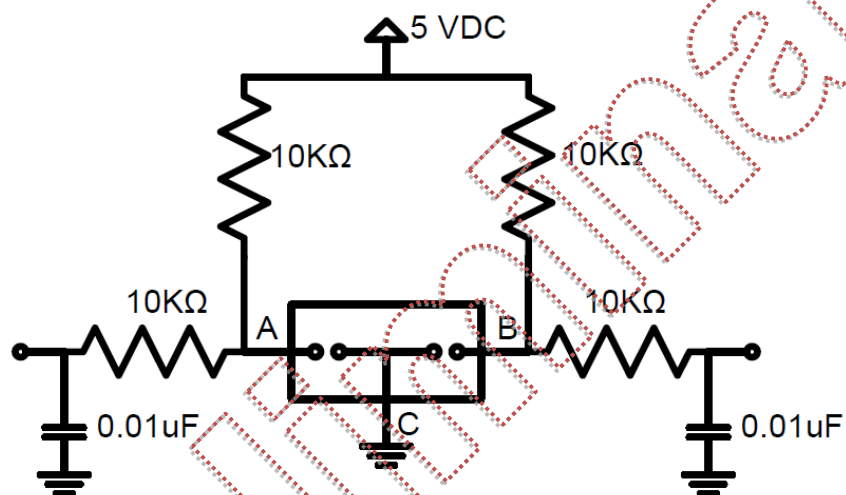
HH2



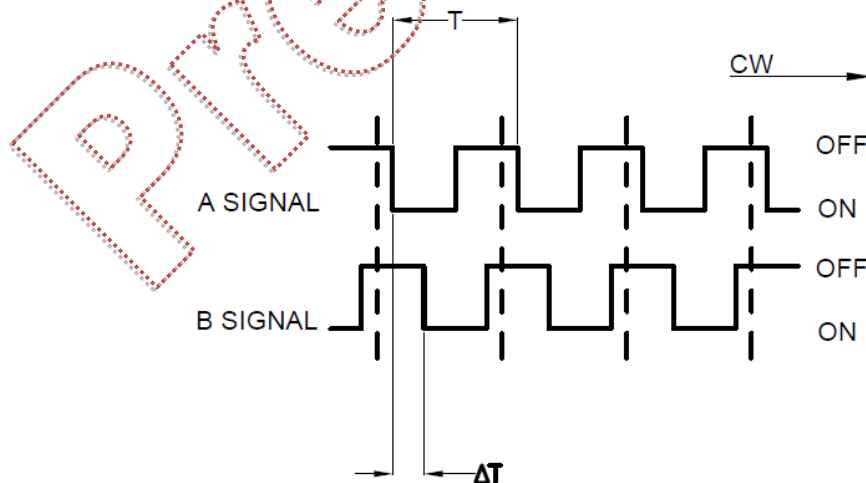
HH3



Recommended Filter Schematic



Output Phase Shift



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10 mm Encoder

EN10 Series



Packaging

Standard Packaging	Plastic Trays
Included Hardware	None

Preliminary

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