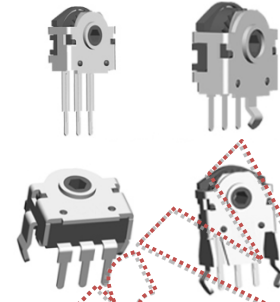


10 mm Encoder

EN10 Series



Features:

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

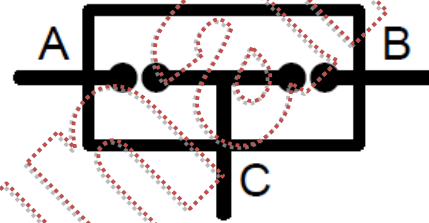


Description:

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

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

TT Electronics | BI Technologies
Circulo de la Amistad #102 PIMSA IV Mexicali B.C. Mexico C.P 21210
Ph: + 1 (714) 447-2345
www.ttelectronics.com

10 mm Encoder

EN10 Series



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

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° (6 or 12 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

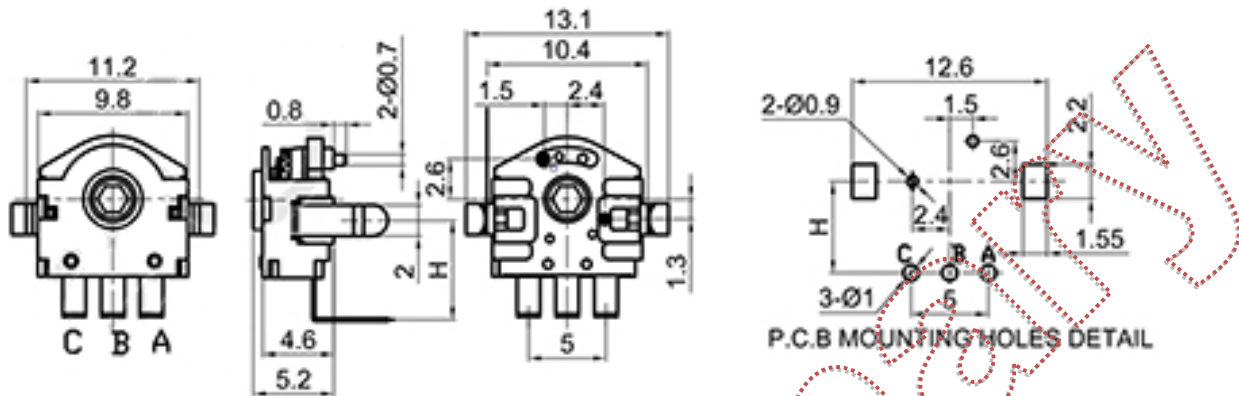
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Outline Drawings

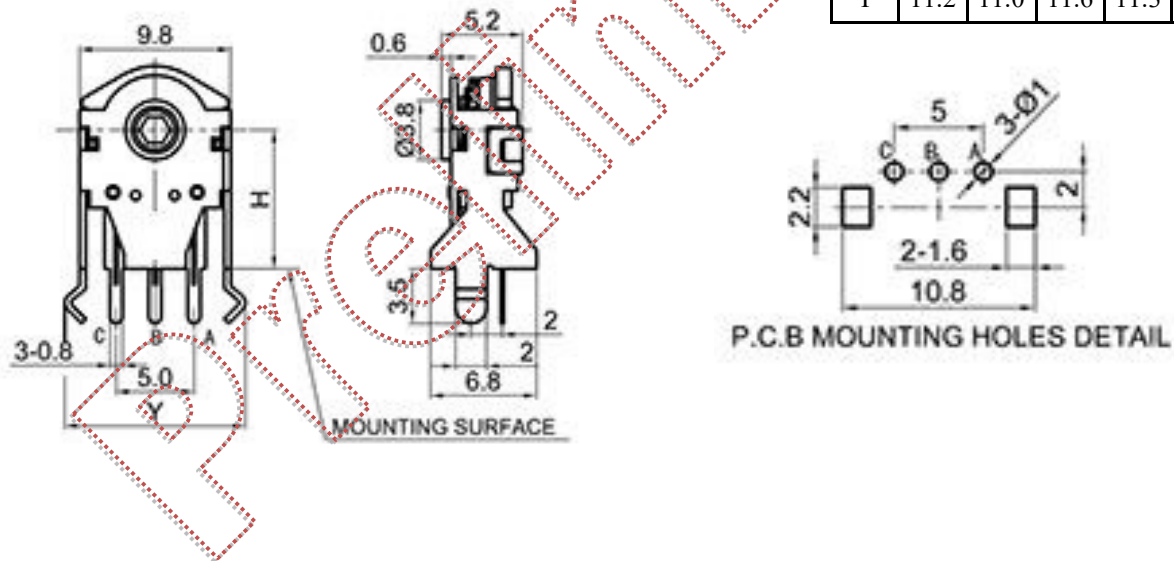
EN10HT - Top Adjust, Double Tab Bracket

X	5	6
H	5.5	6.4



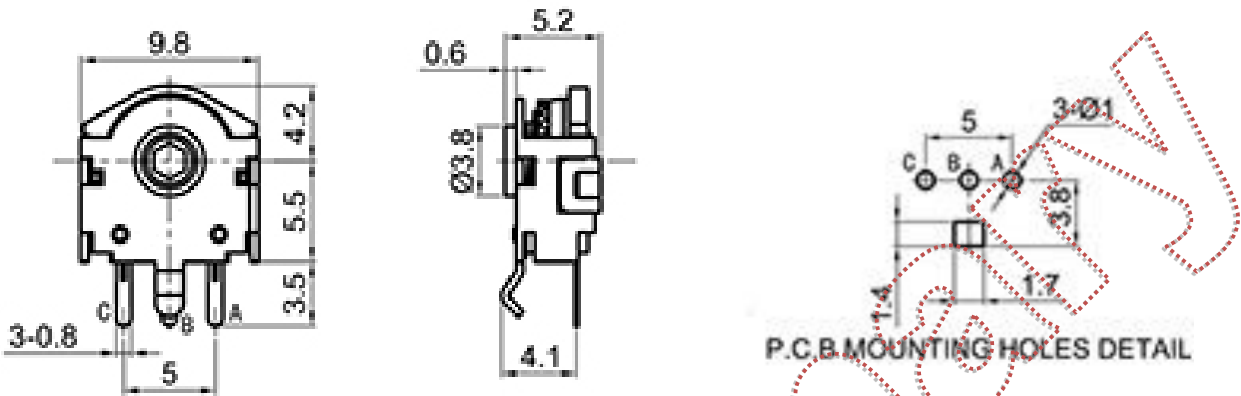
EN10VT - Side Adjust, Double Tab Bracket

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

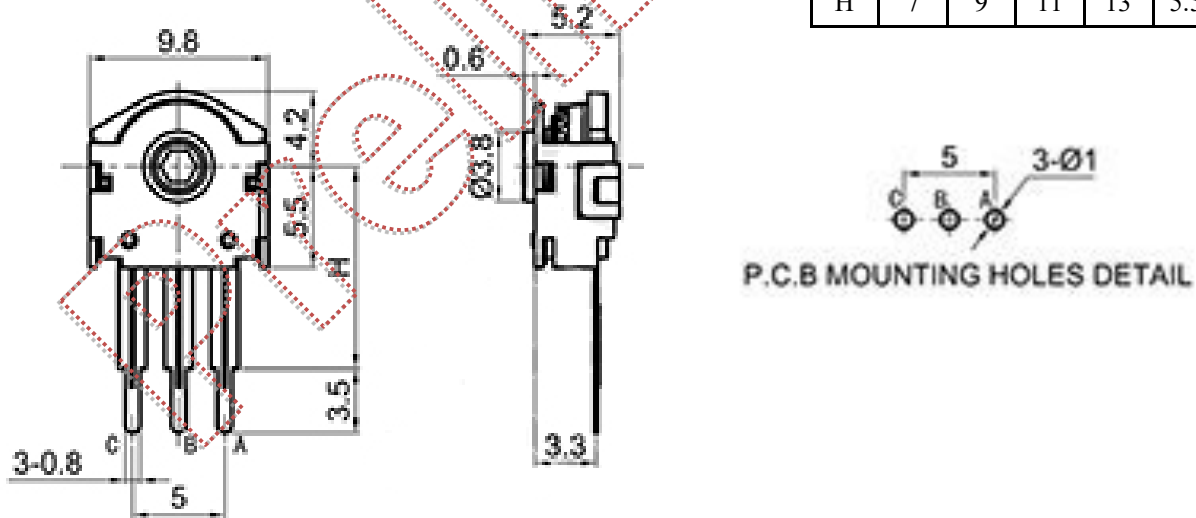


Outline Drawings

EN10VTS - Side Adjust, Single Tab Bracket



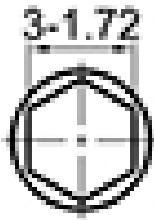
EN10VTN - Side Adjust, No Bracket



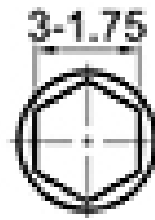
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Shaft Detail

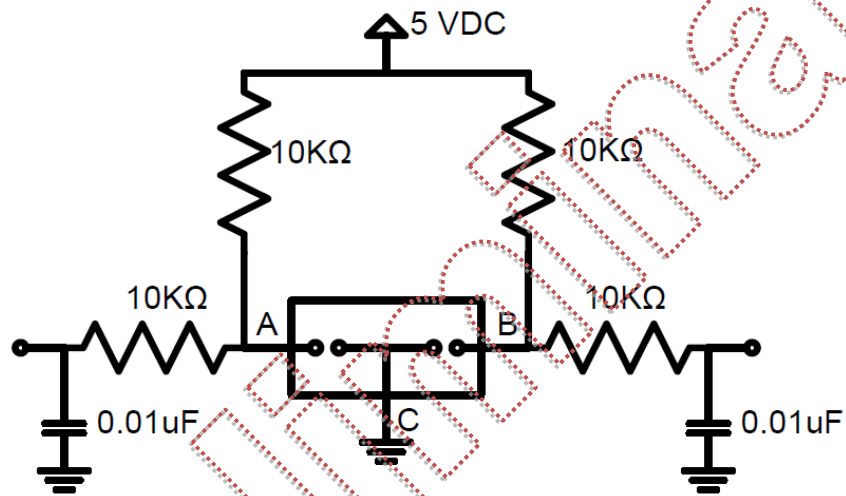
HH2



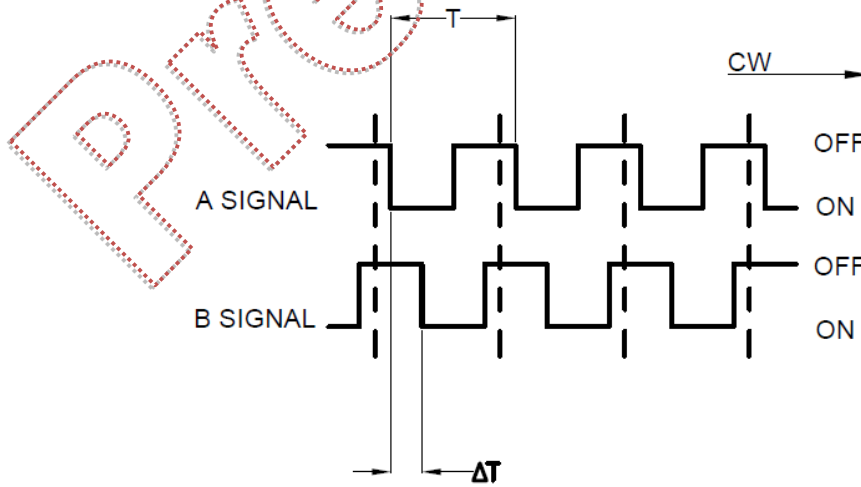
HH3



Recommended Filter Schematic



Output Phase Shift



10 mm Encoder

EN10 Series



Packaging

Standard Packaging	Plastic Trays
Included Hardware	None

Preliminary