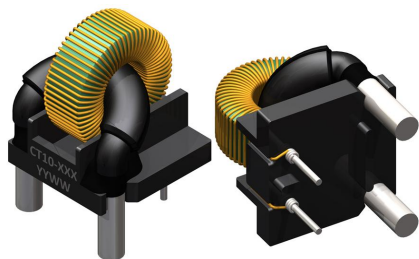


CT10 Series

THT Current Sense Transformers



- Height: 15.8mm (Max)
- Footprint: 14.5mm (Max) x 13.0mm (Max)
- Current Rating: Up to 40A
- Full Selections of Turns Ratios

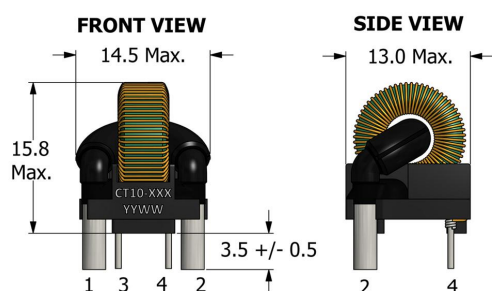
APPLICATIONS

DC/DC Converters
AC/DC Converters

PACKAGING

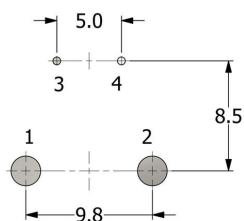
Pieces/Tray: 121
Trays/Box: 10
Pieces/Box: 1210

Mechanical Drawing

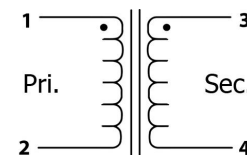


Pins 1 & 2: Dia. 2.3
Pins 3 & 4: Dia. 0.6

Recommended PCB Layout



Schematic



All dimensions are in mm

Electrical Specifications @ 25°C - Operating Temperature Range¹: -40°C to +130°C

Part Number	Turns Ratio (TR)	Secondary Inductance ² (mH, Min)	Secondary DCR (Ω, Max)	Current Rating ⁴ (RMS/Peak) (A, Max)	SRF ⁵ (3-4) (kHz, Typ)	ET Product ⁸ (V-μs, Max)	Hi-Pot (V _{AC})
CT10-100	1:100	14	1.2	40/45	534	580	3000
CT10-200	1:200	55	4.0	40/80	96	1160	3000
CT10-300	1:300	120	10.0	40/80	97	1740	3000
CT10-400	1:400	210	27.0	40/80	93	2320	3000

- Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- Secondary Inductance:** Tested at 10kHz, 0.1 V_{RMS}.
- Primary DCR (1-2):** 0.2 mΩ (Ref)
- Current Rating:** Peak current (50% duty cycle) through primary (1-2) to cause 40°C temperature rise at 25°C ambient.
- SRF values are for reference only.
- Flammability Standard:** Meets UL 94V-0.
- Terminating Resistor (R_B):** To calculate the value use the formula, $R_B = E_O TR / I_P$

- ET Product:** The maximum ET is based upon a flux density of 3700 Gauss at 25°C. Suitable for bipolar applications only.

$$ET = E_O / 2f$$

$$E_O = I_P R_B / TR$$

where as,

$$E_O = \text{Output voltage (V)} \quad TR = \text{Turns Ratio}$$

$$R_B = \text{Term. Resistor (Ω)} \quad f = \text{Frequency (Hz)}$$

$$I_P = \text{Primary Current}$$



Specifications subject to change without prior notice.

TEL.: 800-729-2099

www.icecomponents.com

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