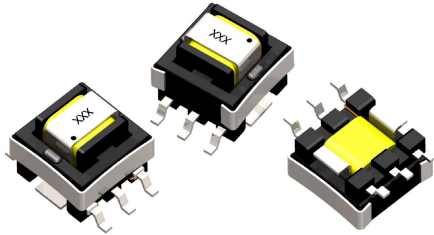


CT01 Series

Low-Profile SMT Current Sense Transformers



- Height: 5.1mm (Max)
- Footprint: 8.2 mm (Max) x 7.0 mm (Max)
- Current Rating: Up to 10A
- Full Selection of Turns Ratios
- Suitable for Pick & Place Applications
- Withstands Solder Reflow

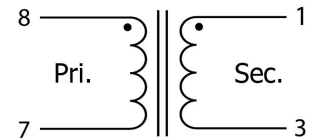
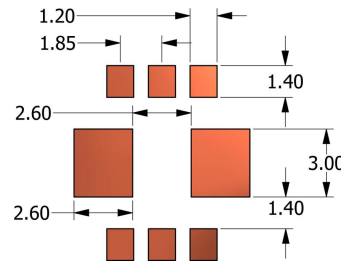
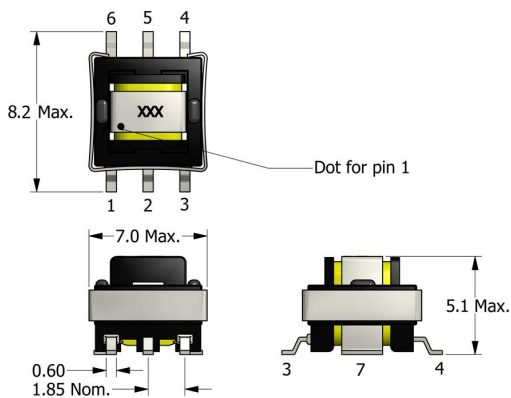
APPLICATIONS

- DC/DC Converters
- AC/DC Converters

PACKAGING

- Reel Diameter: 13"
- Reel Width: 16 mm
- Pieces/Reel: 1000

Mechanical Drawing 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 (μH, Min)	Secondary DCR (Ω, Max)	Current Rating ⁴ (A, Max)	SRF ⁵ (1-3) (MHz, Typ)	ET Product ⁸ (V-μs, Max)	Hi-Pot (V _{AC})
CT01-020-R	1:20	102	0.4	10	19.4	40	500
CT01-030-R	1:30	230	0.6	10	6.5	60	500
CT01-040-R	1:40	408	0.8	10	2.0	80	500
CT01-050-R	1:50	638	1.5	10	1.9	100	500
CT01-060-R	1:60	920	1.7	10	1.6	120	500
CT01-070-R	1:70	1250	3.1	10	1.3	140	500
CT01-100-R	1:100	1680	5.5	10	1.1	200	500
CT01-125-R	1:125	2620	6.5	10	0.8	250	500
CT01-200-R	1:200	6700	35.0	10	0.4	400	500

- Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- Secondary Inductance:** Tested at 10kHz, 0.1 V_{RMS}.
- Primary DCR (8-7):** 4.7 mΩ (Ref)
- Current Rating:** Peak current (50% duty cycle) through primary (8-7) 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 = E₀TR/I_P

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

$$ET = E_0/2f$$

$$E_0 = I_P R_B / TR$$

where as,

$$E_0 = \text{Output voltage (V)} \quad TR = \text{Turns Ratio}$$

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

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



Specifications subject to change without prior notice.

TEL.: 800-729-2099

www.icecomponents.com

August 11 2021 - CT01 Series