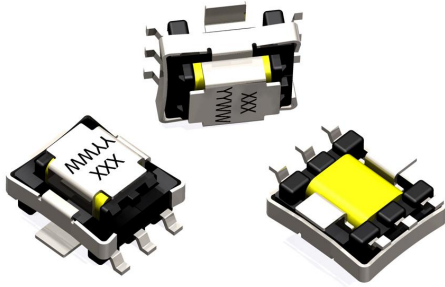


# CT04 Series

## Low-Profile SMT Current Sense Transformers



- Height: 4.10mm (Max)
- Footprint: 6.90mm (Max) x 8.13mm (Max)
- Current Rating: Up to 20A
- Full Selection of Turns Ratios
- Suitable for Pick & Place Applications
- Withstands Solder Reflow

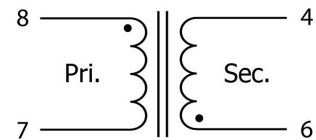
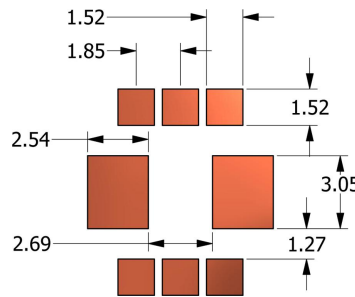
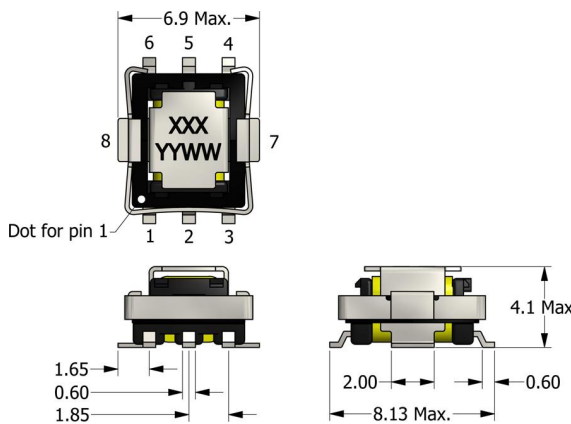
### APPLICATIONS

- DC/DC Converters
- AC/DC Converters

### PACKAGING

- Reel Diameter: 13"
- Reel Width: 16 mm
- Pieces/Reel: 1200

### Mechanical Drawing      Recommended PCB Layout      Schematic



All dimensions are in mm

### Electrical Specifications @ 25°C - Operating Temperature Range<sup>1</sup>: -40°C to +130°C

Part Number	Turns Ratio (TR)	Secondary Inductance <sup>2</sup> (μH, Min)	Secondary DCR (Ω, Max)	Current Rating <sup>4</sup> (A, Max)	SRF <sup>5</sup> (6-4) (MHz, Typ)	ET Product <sup>8</sup> (V-μs, Max)	Hi-Pot (V <sub>AC</sub> )
CT04-050	1:50	352	0.9	20	2.5	65	500
CT04-070	1:70	690	1.7	20	1.5	90	500
CT04-100	1:100	1400	3.0	20	1.0	130	500
CT04-125	1:125	2200	5.0	20	1.0	160	500

- Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- Secondary Inductance:** Tested at 10kHz, 0.1V<sub>RMS</sub>.
- Primary DCR (8-7):** 0.4 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<sub>B</sub>):** To calculate the value use the formula,  $R_B = E_0 TR / I_P$

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

$$ET = E_0 / 2f$$

$$E_0 = I_P R_B / TR$$

- where as,
- $E_0$  = Output voltage (V)
  - $R_B$  = Term. Resistor (Ω)
  - $I_P$  = Primary Current
  - TR = Turns Ratio
  - f = Frequency (Hz)



Specifications subject to change without prior notice.

TEL.: 800-729-2099

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