CT04 Series
Low-Profile SMT Current Sense Transformers

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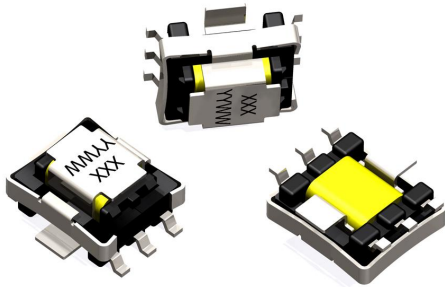
- **Height: 4.10mm** *(Max)*
- **Footprint: 6.90mm** *(Max)* **x 8.13mm** *(Max)*
- **Current Rating: Up to 20A**
- **Full Selection of Turns Ratios**
- **Suitable for Pick & Place Applications**
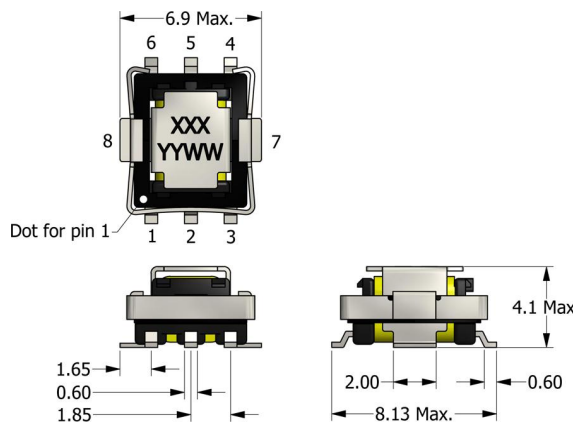- **Withstands Solder Reflow**
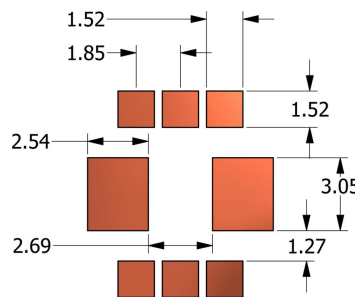
APPLICATIONS
DC/DC Converters
AC/DC Converters

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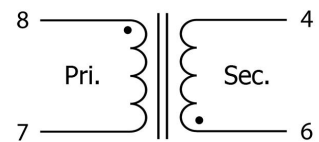Reel Diameter: 13"
Reel Width: 16 mm
Pieces/Reel: 1200

Mechanical Drawing	Recommended PCB Layout	Schematic

All dimensions are in mm

Electrical Specifications @ 25°C - Operating Temperature Range [1]: -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] (6-4) *(MHz, Typ)*	ET Product [8] *(V-µs, Max)*	Hi-Pot *(V$_{AC}$)*
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

1. **Operating Temp. Range:** The combination of ambient temperature and temperature rise.
2. **Secondary Inductance:** Tested at 10kHz, 0.1V$_{RMS}$.
3. **Primary DCR (8-7):** 0.4 mΩ (Ref)
4. **Current Rating:** Peak current (50% duty cycle) through primary (8-7) to cause 40°C temperature rise at 25°C ambient.
5. SRF values are for reference only.
6. **Flammability Standard:** Meets UL 94V-0.
7. **Terminating Resistor (R$_B$):** To calculate the value use the formula, $R_B = E_O TR/I_P$

8. **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 = Output voltage (V) TR = Turns Ratio
R_B = Term. Resistor (Ω) f = Frequency (Hz)
I_P = Primary Current

RoHS COMPLIANT

CUSTOM SOLUTIONS AVAILABLE

Specifications subject to change without prior notice.