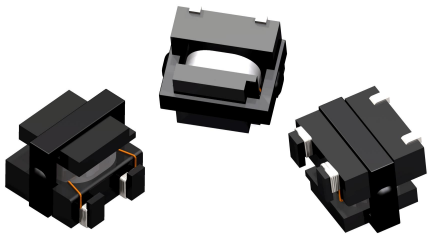
CT06 Series

SMT Current Sense Transformers



- Height: 5.0mm *(Max)*
- Footprint: 6.5mm *(Ref)* x 6.7mm *(Max)*
- Current Rating: Up to 18A
- Hi-Pot tested at 1,500 V_{AC}
- Meets Basic Creepage
- Patent Pending

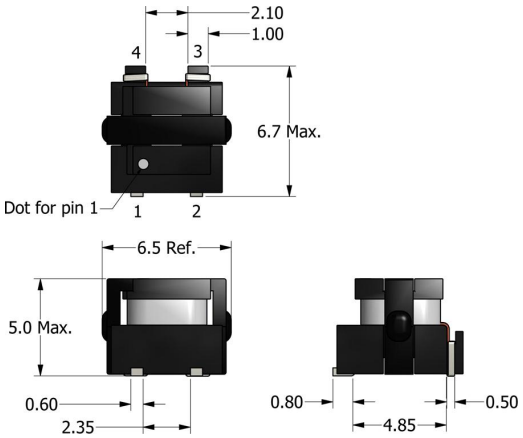
APPLICATIONS

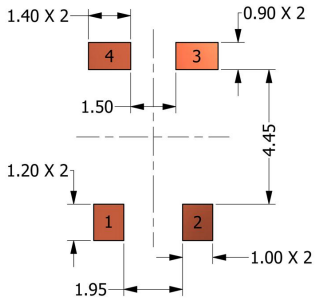
DC/DC Converters
AC/DC Converters
POL Converters

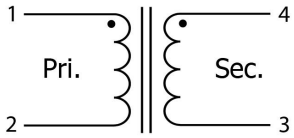
PACKAGING

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 Range [1]: -40°C to +130°C							
Part Number	Turns Ratio *(TR)*	Secondary Inductance [2] *(mH, Min)*	Secondary DCR *(Ω, Max)*	Current Rating [4] *(A, Max)*	SRF [5] (4-3) *(MHz, Typ)*	ET Product [9] *(V-µs, Max)*	Hi-Pot *(V_{AC})*
CT06-050	1:50	0.35	1.3	18	4.1	70	1500
CT06-100	1:100	1.40	5.0	18	1.6	140	1500
CT06-150	1:150	3.15	15.2	18	1.1	210	1500
CT06-200	1:200	5.60	25.0	18	0.8	280	1500
CT06-250	1:250	8.75	37.2	18	0.7	350	1500

1. **Operating Temp. Range:** The combination of ambient temperature and temperature rise.
2. **Secondary Inductance:** Tested at 10kHz, 0.1 V_{RMS}.
3. **Primary DCR (1-2):** 1 mΩ (Ref)
4. **Current Rating:** Peak current (50% duty cycle) through primary (1-2) 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. **Meets RXT-2 Class F Insulation System (E169423).**
8. **Terminating Resistor (R_B):** To calculate the value use the formula, $R_B = E_O TR/I_P$
9. **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.