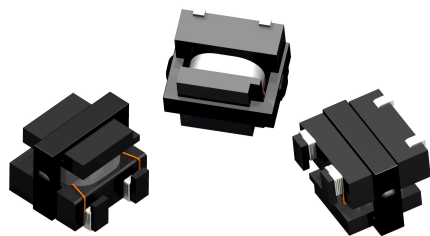


# CT06 Series

## 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<sub>AC</sub>
- Meets Basic Creepage
- Patent Pending

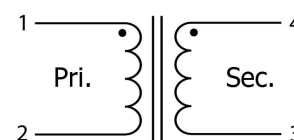
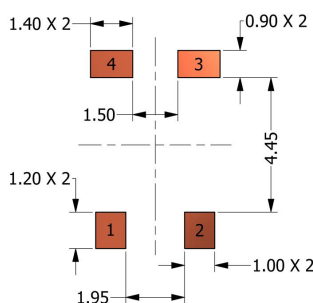
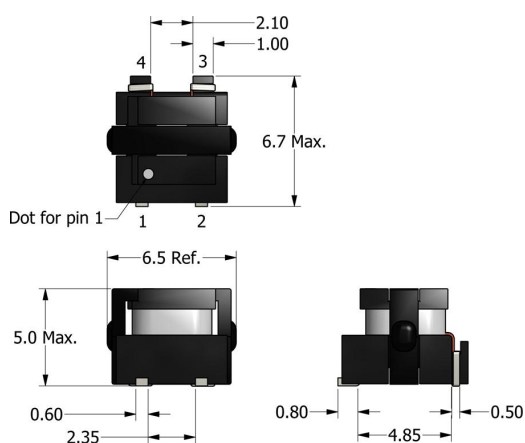
### APPLICATIONS

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<sup>1</sup>: -40°C to +130°C

Part Number	Turns Ratio (TR)	Secondary Inductance <sup>2</sup> (mH, Min)	Secondary DCR (Ω, Max)	Current Rating <sup>4</sup> (A, Max)	SRF <sup>5</sup> (4-3) (MHz, Typ)	ET Product <sup>9</sup> (V-μs, Max)	Hi-Pot (V <sub>AC</sub> )
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

- Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- Secondary Inductance:** Tested at 10kHz, 0.1 V<sub>RMS</sub>.
- Primary DCR (1-2):** 1 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.
- Meets RXT-2 Class F Insulation System (E169423).**
- 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)     $TR =$  Turns Ratio  
 $R_B =$  Term. Resistor (Ω)     $f =$  Frequency (Hz)  
 $I_p =$  Primary Current



Specifications subject to change without prior notice.

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www.icecomponents.com

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