

# CT05 Series Current Sense Transformer



## FEATURES

- Full Selection of Turns Ratios
- Primary Current (Ip) Rated for 25A
- Frequency Range up to 500kHz
- Compact Package

## APPLICATIONS

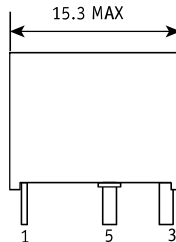
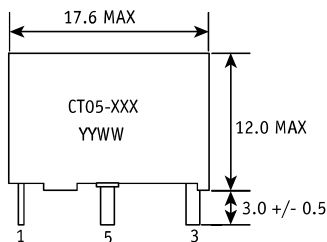
- DC/DC Converters
- AC/DC Converters

## PACKAGING

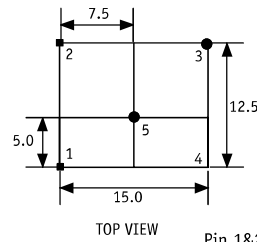
- Pcs/Tray: 121
- Trays/Box: 10
- Pcs/Box: 1210

## Mechanical

Dimensions in mm

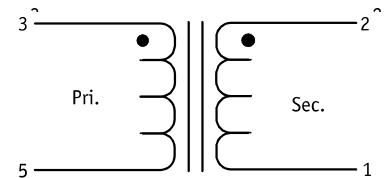


## Footprint



Pin 1&2: sq. 0.5  
Pin 3&5: dia. 1.2

## Schematic



## Electrical Specifications

| Part Number | Turns Ratio (Np:Ns) | Sec. Ls <sup>1</sup> (mH, min.) | Sec. DCR (Ω, max.) | ET <sup>5</sup> (V-μS max.) | S.R.F <sup>6</sup> (kHz) | Hi-Pot |
|-------------|---------------------|---------------------------------|--------------------|-----------------------------|--------------------------|--------|
| CT05-050    | 1:50                | 4.7                             | 0.50               | 175                         | 600.0                    | 4,000  |
| CT05-100    | 1:100               | 18.0                            | 2.0                | 350                         | 250.0                    | 4,000  |
| CT05-200    | 1:200               | 76.0                            | 4.5                | 700                         | 50.0                     | 4,000  |
| CT05-500    | 1:500               | 470                             | 16.0               | 1750                        | 17.0                     | 4,000  |
| CT05-1000   | 1:1000              | 1900                            | 50.0               | 3500                        | 7.5                      | 4,000  |

1. Tested @ 10kHz, 0.1Vrms  
-1000 tested @ 1kHz, 0.1Vrms
2. Electrical specifications at 25°C.
3. Operating temperature range: -40°C to +130°C.
4. Meets UL 94V-0.
5. ET rating is based on a bipolar waveform
6. Self-resonant frequency (S.R.F) for reference only

## Output Voltage and ET Rating Formulas

Rb (Ω): Terminating Resistance  
F (Hz): Freq  
Es (V): Output Voltage  
ET rating is based on a bipolar waveform

$$Es = I_p * R_b / N_s$$

$$ET = Es * 1/2F$$

