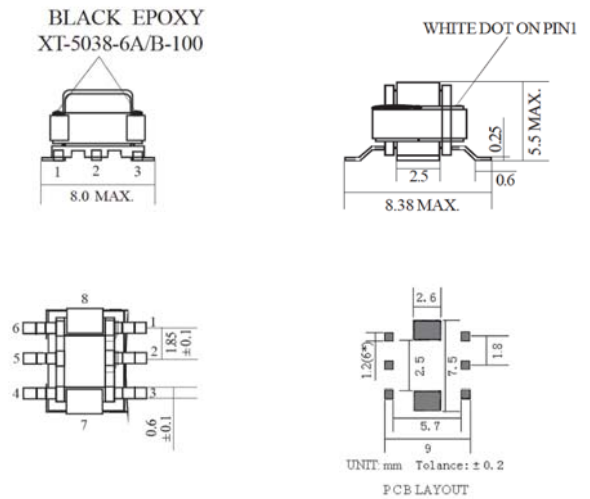
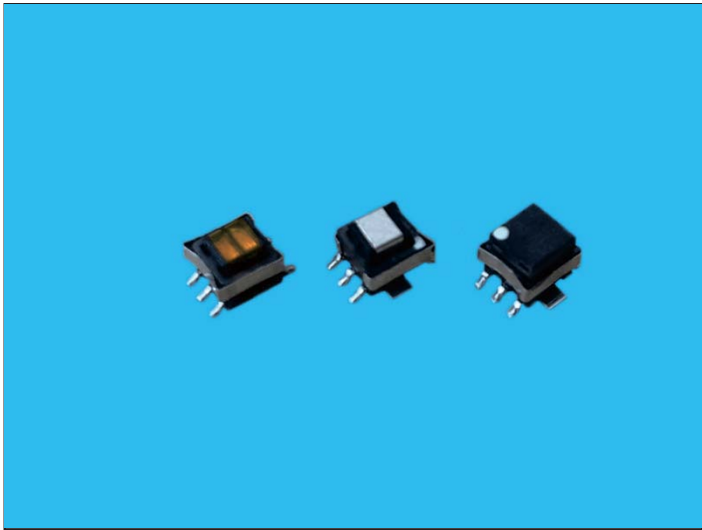


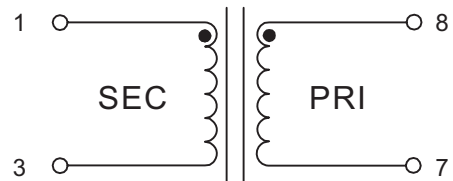
# SMD Current Transformers



## Description

- For use up to 1MHz and Sensed currents up to 20A.
- SMD type Current Transformer, low-profile.
- Ideally used in On-board Charger(OBC), Mobile device wireless charging and other electronic devices.
- Two sensed currents to meet the requirements of different applications.
- RoHS compliant.
- Operating temperature range: -40°C to +125°C.

## Schematics



## Electrical Specifications

| Part Number | Turns ratio | Inductance (uH) | DCR(PRI) (mΩ)Typ. | DCR(SEC) (mΩ)Typ. | Volt-time (μVs) | Isensed (A)Max. | RT (Ω) |
|-------------|-------------|-----------------|-------------------|-------------------|-----------------|-----------------|--------|
| EE5.0H-001  | 1:20        | 80              | 0.65              | 360               | 10.6            | 20.0            | 1.0    |
| EE5.0L-002  | 1:20        | 80              | 4.00              | 360               | 10.6            | 10.0            | 2.0    |
| EE5.0H-003  | 1:30        | 180             | 0.65              | 550               | 16.0            | 20.0            | 1.5    |
| EE5.0L-004  | 1:30        | 180             | 4.00              | 550               | 16.0            | 10.0            | 3.0    |
| EE5.0H-005  | 1:40        | 320             | 0.65              | 900               | 21.3            | 20.0            | 2.0    |
| EE5.0L-006  | 1:40        | 320             | 4.00              | 900               | 21.3            | 10.0            | 4.0    |
| EE5.0H-007  | 1:50        | 500             | 0.65              | 1100              | 26.6            | 20.0            | 2.5    |
| EE5.0L-008  | 1:50        | 500             | 4.00              | 1100              | 26.6            | 10.0            | 5.0    |
| EE5.0H-009  | 1:60        | 730             | 0.65              | 1900              | 31.9            | 20.0            | 3.0    |
| EE5.0L-010  | 1:60        | 730             | 4.00              | 1900              | 31.9            | 10.0            | 6.0    |
| EE5.0H-011  | 1:70        | 980             | 0.65              | 3200              | 37.2            | 20.0            | 3.5    |

## Electrical Specifications

| Part Number | Turns ratio | Inductance (uH) | DCR(PRI) (mΩ)Typ. | DCR(SEC) (mΩ)Typ. | Volt-time (μVs) | Isensed (A)Max. | RT (Ω) |
|-------------|-------------|-----------------|-------------------|-------------------|-----------------|-----------------|--------|
| EE5.0L-012  | 1:70        | 980             | 4.00              | 3200              | 37.2            | 10.0            | 7.0    |
| EE5.0H-013  | 1:100       | 2000            | 0.65              | 4800              | 53.2            | 20.0            | 5.0    |
| EE5.0L-014  | 1:100       | 2000            | 4.00              | 4800              | 53.2            | 10.0            | 10.0   |
| EE5.0H-015  | 1:125       | 3000            | 0.65              | 7000              | 66.5            | 20.0            | 6.3    |
| EE5.0L-016  | 1:125       | 3000            | 4.00              | 7000              | 66.5            | 10.0            | 12.5   |
| EE5.0H-017  | 1:150       | 4300            | 0.65              | 13000             | 79.8            | 20.0            | 7.5    |
| EE5.0L-018  | 1:150       | 4300            | 4.00              | 13000             | 79.8            | 10.0            | 15.0   |

- Inductance tested on secondary side at 10kHz,0.1V .
- Maximum volt-time product for the secondary, based on peak flux density 2000Gauss.  
To calculate the peak flux density for uni-polar current use following formula:  
Bpk(Gauss)= 37.59 \* VREF\* (Max.Duty Cycle)\*105/(N\*Freq in kHz).