

Toroidal Current Transformer

The **TA21CA11** Series low cost toroidal current transformers are designed for application where an AC current signal must be transformed into lower AC current or voltage signal appropriate for micro-processor based circuits.

The TA21CA11 series are designed specifically for integration into products which require exceptionally accurate signal transformation with low phase shift while exposed to harsh environmental operating conditions.



Features:

Rated Primary: 5 to 15 Ampere

Secondary Output:

- 0.333V to 7.07V @ Rated Current, or
- mA, standard winding ratios:
 - 1:1000, 1:2000
 - 1:2500

Available in PCB mounted configuration or with lead wires.

Specifications:

- Frequency: 50 - 400 Hz.
- Isolation Voltage: 2500 V_{RMS}, 1 minute @ 0.5mA.
- Surge withstand potential: 5000V (1.2/50µsec standard shock wave).
- Dielectric Resistance: 1,000 M ohms @ 500 V_{DC}.
- Rated Load Resistance:
 - mV output: ≥ 100k Ohms.
 - mA output: ≤ 300 Ohms.
- Operating Temperature: -40°C to +85° C.

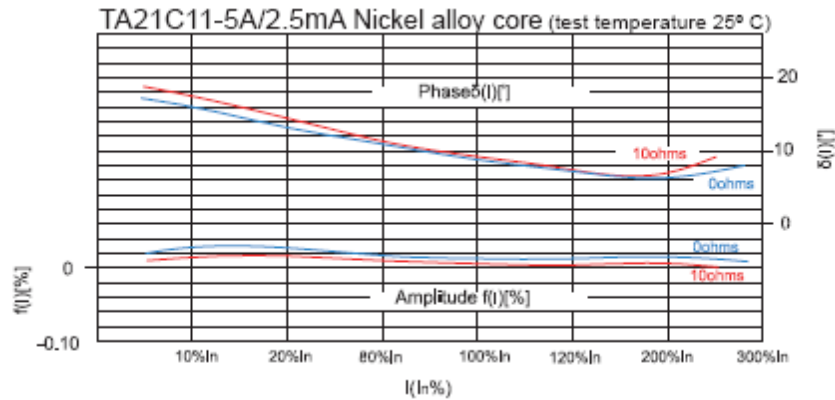
- Construction:
 - Core: Nanocrystalline, Silicon Steel CRGO or Nickel Alloy.
 - Case material – PBT Resin, UL flame retardant rating 94 V-0.
 - Epoxy encapsulated.
- CE Approved.
- RoHS compliant.



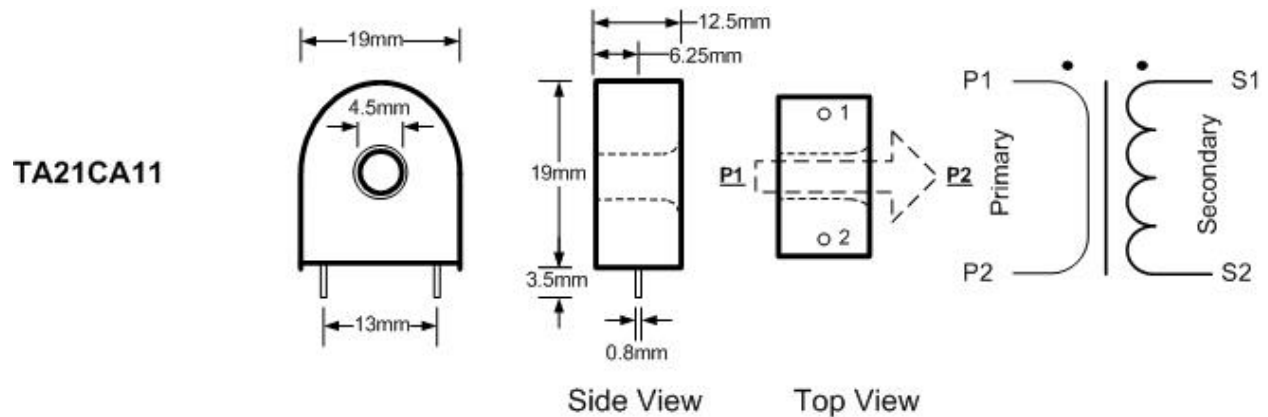
Performance:

- Accuracy Class: 0.2, 0.5 (IEC 60044-1 Part 1 Current Transformers)
- Accuracy: ≤ ± 0.1% @ Rated Current
- Phase shift: ≤ 10' @ rated current.
- Linearity: ±1% from 5% to 200% of rated primary current.

Typical Performance:



Outline Drawing:



Custom PCB mounted current transformer designs are available to meet the specific application requirements. For a no obligation technical evaluation, please provide the specific performance requirements to engineering@tichenassociates.com or the address below.