

## PCB Mounted, Toroidal Current Transformer

The **TA23A11** Series of toroidal, PCB mounted current transformer is designed for application where an AC current signal must be transformed into lower AC current signal appropriate for micro-processor based circuits.

The TA23A11 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:** 5A to 100A depending upon primary to secondary ratio selected.

#### Secondary Output:

Standard winding ratios:

- 1:1000, 1:2000, 1:2500
- 1:3000, 1:5000

Asymmetrical mounting pattern.

Toroidal core material options;  
Nanocrystalline, Silicon Steel CRGO or  
Nickel Alloy.

### Specifications:

- Frequency: 50 to 400 Hz.
- Dielectric Resistance: 1,000 M ohms @ 500 VDC.
- Isolation Voltage: 2500 V<sub>RMS</sub> for 1 minute.
- Surge Withstand Potential: 5000V (1.2/50 μsecond standard shock wave).
- Operating Temperature: 25°C to +70°C.  
Optional: -40°C to +85°C.

- Construction:
  - Core material: Nanocrystalline, Silicon Steel CRGO (cold rolled grain oriented) or Nickel alloy.
  - Exterior Material: PBT Resin UL flame retardant rating 94 V-0.
  - Epoxy encapsulated.

### Performance:

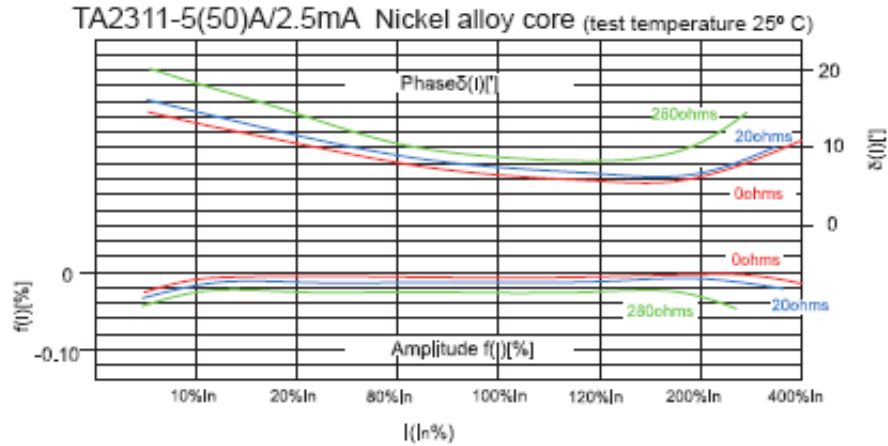
- Accuracy Class: 0.1, 0.2, 0.5 (IEC 60044-1 Part 1 Current Transformers Class 0.1, 0.2)
- Linearity: 5% to 400% of Rated Current
- Current error @ Rated Current:  $\leq \pm 0.2\%$
- Phase shift @ Rated Current:  $\leq 5'$
- Secondary burden resistance:  $\leq 1000$  Ohms

RoHS compliant

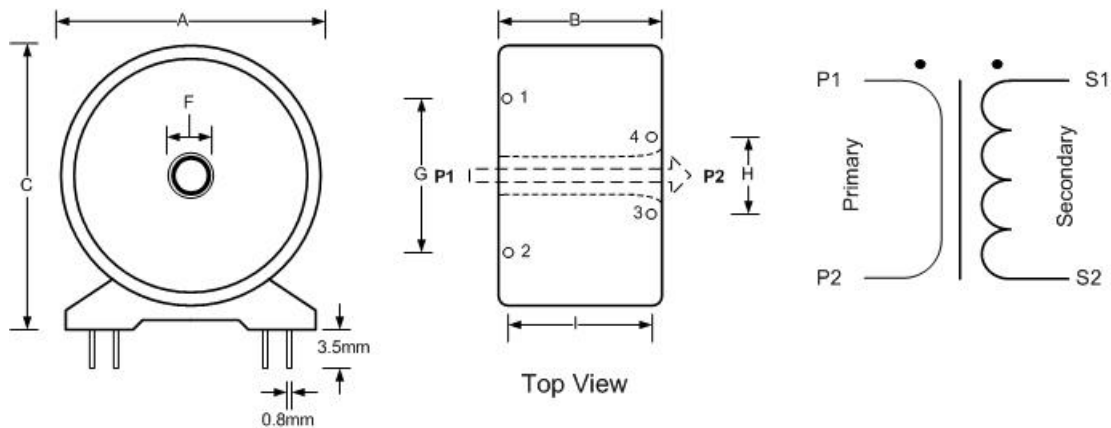


CE Approved

## Typical Performance



## Outline Drawing:



A	B	C	D	E	F	G	H	I
34.00mm (1.339")	22.00mm (0.866")	36.00mm (1.417")	3.50mm (0.138")	0.80mm (0.031")	6.00mm (0.236")	20.32mm (0.800")	10.16mm (0.400")	20.00mm (0.787")

**NOTE:** The TA23A11 Series of PCB mounted current transformers are bulk packed. Purchase order quantities should be in increments of the bulk packaging quantities:

- TA23A11 – 216 pc increments, 1728 pcs per bulk pack  
Bulk pack box = 0.024 CBM, 22.6kg

**Custom 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](mailto:engineering@tichenassociates.com) or the address below.