

Toroidal, PCB Mounted Voltage Transformer

The **TV5202** series of toroidal, PCB mounted voltage transformers are designed for applications where the primary AC voltage signal must be transformed accurately into a lower secondary AC voltage signal appropriate for micro-processor based circuit designs.



These printed circuit board (PCB) mounted voltage transformers are designed to provide exceptional primary signal transformation accuracy with low phase shift while operating in harsh operating environments. The potential transformers (PT)/ voltage transformers (VT) feature high dielectric insulation and asymmetrical mounting packages.

Features:

- Asymmetrical mounting pattern.
- Toroidal Core using Silicon steel or Nickel Alloy material.
- Printed circuit board mounted (PIH)

Specifications:

- Primary: 57.7V, 100V, 120V or 150 VAC
- Secondary Options: 100mV to 7.07 V @ rated voltage
- Frequency: 50 to 400 Hz
- Isolation Voltage: 2500 V_{RMS} for 1 minute
- Dielectric Resistance: 1,000 M ohms @ 500 VDC
- Surge withstand potential: 5000V (1.2/50 μ s standard shock wave)
- Operating Temperature: -25°C to +55° C
Optional: -40°C to +85° C

- Construction:
 - Exterior Material: PBT Resin, UL 94 V0 flame retardant rating
 - Interior Insulation: Epoxy resin encapsulated
- **RoHS Compliant**



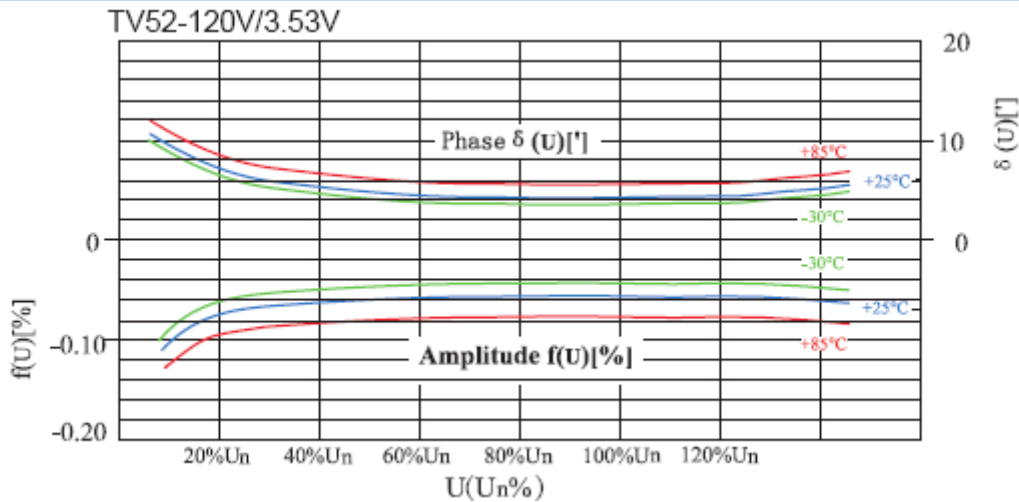
Performance:

- Accuracy Class: 0.1L (IEC 60044-2 Part 2 Voltage Transformers Class 0.5)
- Linearity: 20 to 120% of Rated Voltage
- Voltage error @ Rated Voltage: $\leq \pm 0.5\%$
- Phase shift @ Rated Voltage: $\leq 30'$
- Excitation Current: ≤ 0.5 mA
- Rated load resistance: $\geq 100k$ Ohms ± 10 Ohms

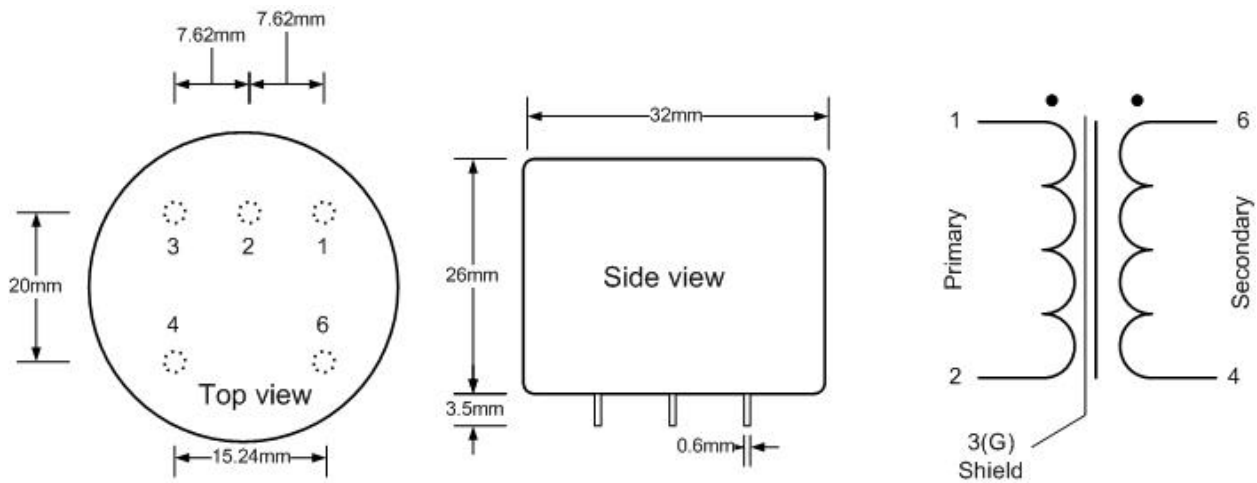
Options:

The voltage transformer can be configured for panel mounting with leads. Standard lead length is 0.6m (2 Ft.). Lead length and lead termination can be designed to meet the specific application requirements.

Typical Performance:



Outline Drawing:



Notes:

TV5202 Packaging:

Carton -355mm (14.0") x 243mm (9.6") x 45mm (1.8"), **60 pcs** per carton
 Bulk pack carton - 360mm (14.2") x 250mm (9.8") x 265mm (10.4")
300 pcs per bulk pack



Custom voltage 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.