

Toroidal, Panel Mounted Voltage Transformer

The TV2501 Series of toroidal, panel mounted voltage transformer is designed for application where an AC current signal must be transformed into lower AC voltage signal appropriate for micro-processor based circuits.

The TV2501 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: 150V, 220V, or 300VAC

Secondary Output Options: 100mV to 7.07 V
@ rated voltage

Specifications:

- Frequency: 50 to 400 Hz
- Dielectric Resistance: 1,000 Mohms @ 500 Vdc
- Isolation Voltage: 2500 Vrms for 1 minute @0.5 mA.
- Surge withstand potential: 5000V (1.2/50 μ second standard shock wave)
- Operating Temperature: -25°C to +55°C
Optional: -40°C to +85°C
- Construction:
 - Case Material: PBT Resin, UL 94 V-0
 - Interior Insulation: Epoxy resin

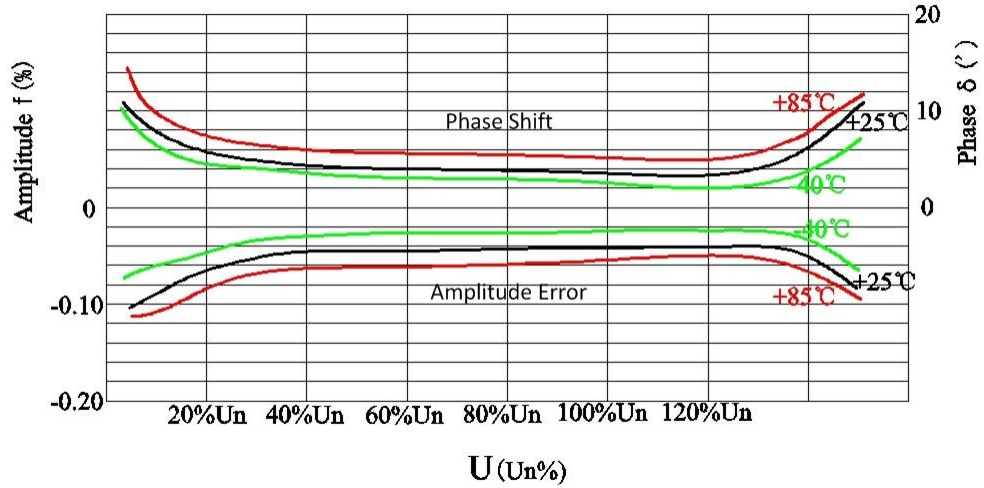
- Leads: 0.61m (2.0FT), Twisted Pair;
 - Primary: 0.50mm² (20AWG), 300V, FEP fluoroplastic high temperature, Red/ Green.
 - Secondary: 0.34mm² (22AWG), 300V, FEP fluoroplastic high temperature, Yellow/ Blue/ Black.
- Lead termination: Stripped and tinned.
- RoHS compliant



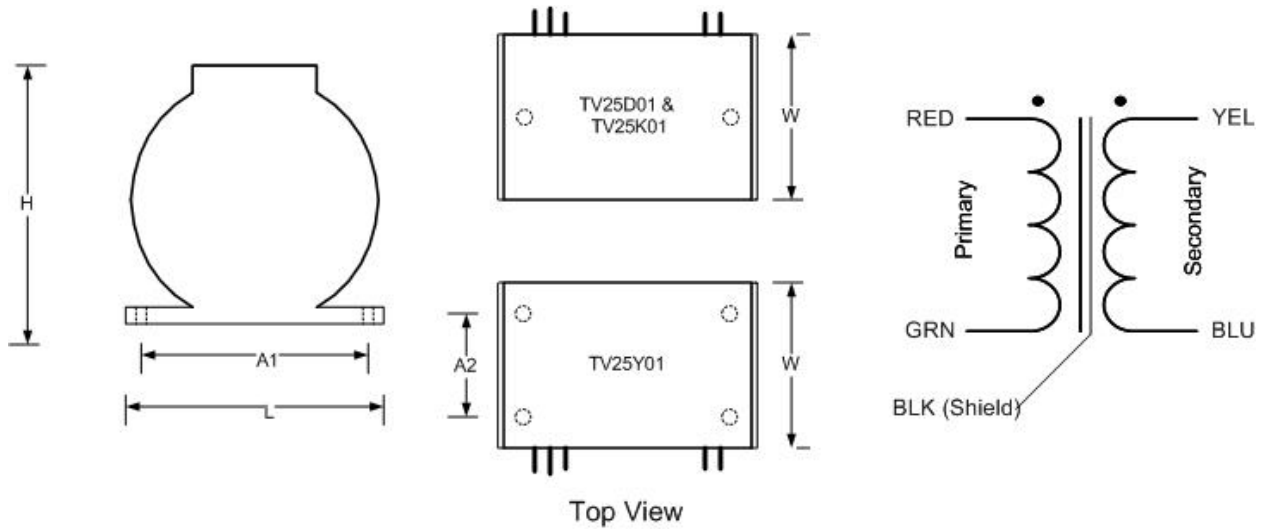
Performance:

- Accuracy Class: 0.1L (IEC 60044-2 Part 2 Voltage Transformers Class 0.1)
- Linearity: 5% to 120% of Rated Voltage
- Voltage error @ Rated Voltage: $\leq \pm 0.1\%$
- Phase shift @ Rated Voltage: $\leq 5'$
- Excitation Current: ≤ 0.5 mA
- Secondary burden resistance: 100 kOhm

Typical Performance (Primary = 120VAC FS, $R_{Load} \geq 100\text{ kOhm}$)



Outline Drawing:



Dimensions:

	L	W	H	A1	A2
TA25D01	50.0mm (1.97")	26.0mm (1.02")	46.0mm (1.81")	40.0mm (1.58")	
TA25K01	44.0mm (1.73")	31.0mm (1.22")	46.0mm (1.81")	36.0mm (1.42")	
TA25Y01	49.0mm (1.93")	32.0mm (1.26")	46.0mm (1.81")	40.0mm (1.58")	22.0mm (0.87")

NOTE: The TV25x01 Series of PCB mounted voltage transformers are bulk packed. Purchase order quantities should be in increments of the bulk packaging quantities:

- TV25x01 – __ pc increments, __ pcs per bulk pack
(Bulk pack box = 0.015CBM, __ kg)

Custom toroidal 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.