

# Topstek AC Current Sensor TU24P-250A

## TU24P-250A

### Features and Applications

- ◆ Accurate AC current monitoring/measuring device
- ◆ Fast clamp-on application on existing switchboard wire
- ◆ Excellent linearity of the output voltage over a wide input range
- ◆ Ferrite core ensuring fast response time and low phase lag
- ◆ Excellent frequency response (50 ~ 100 kHz) for accurate RMS measurement without DC component
- ◆ Wide measurement range (20mA ~ 250Amp AC)
- ◆ Good linearity for low current (20mA ~ 2A) detection
- ◆ Secondary coil equipped with two 7.5V surge suppression diodes for equipment protection and provide linear output up to 15.6Vp-p or 5.5VRMS
- ◆ High voltage isolation between measuring circuit and current-carrying conductor (1000V 60Hz AC)
- ◆ Extended operating temperature range -20°C to 50°C
- ◆ Flame-Retardant plastic case using UL classified materials
- ◆ All materials used are RoHS compliant
- ◆ AC Current Sensor/Current Transducer applications like power meter current detectors or equipment over current protection circuits

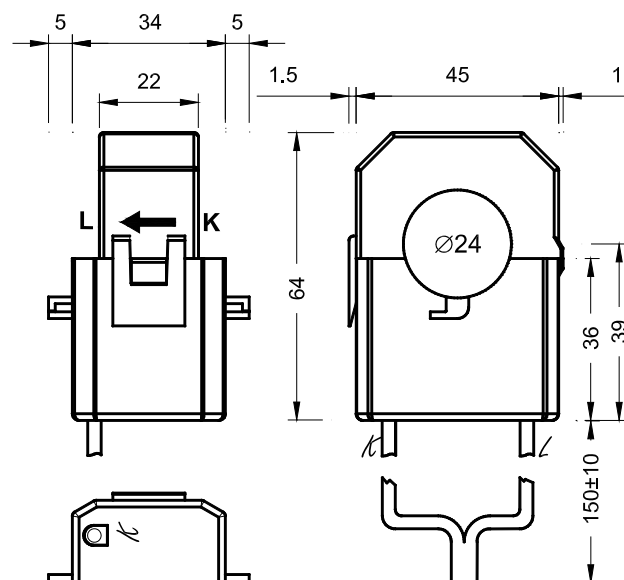
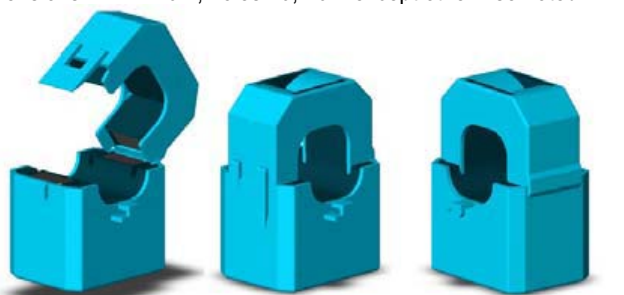


### Specifications

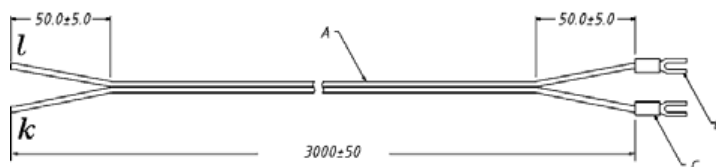
Parameter	TU24P-250A
Rated Input Current Range	50mARMS~250ARMS (50Hz/60Hz)
Max Continuous Current	360ARMS
Linear Output Range	15.6V <sub>p-p</sub> or 5.5V <sub>RMS</sub>
Working Frequency Range	50Hz~100kHz
No. of Secondary Turns	3000±2
Secondary Coil Resistance	260±20Ω
Secondary Surge Voltage Clamping	2(two) 7.5V diodes
Dielectric Strength	AC 1KV 60sec
Isolation Resistance	>100MΩ @ 500VDC
Operating Temperature	-20°C to 50°C
Storage Temperature	-30°C to 90°C
Case Material	UL94V0 Nylon 66
Terminals (Standard)	UL 1017 AWG22, Length:150±10mm
Terminals (Option Y)	UL 1017 AWG18 Wire, Length:3000±50mm Two Y4.3 Terminals with PVC Tube
Mating Output Connector	JST SMP-02V-BC
Approximate Weight	205g

### Dimensions and pin identification

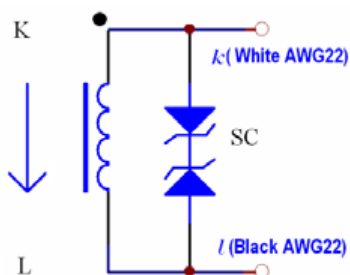
All dimensions in mm ±0.2, holes -0, +0.2 except otherwise noted.



Standard Terminal



Option Y Terminal



Equivalent Circuit Diagram

