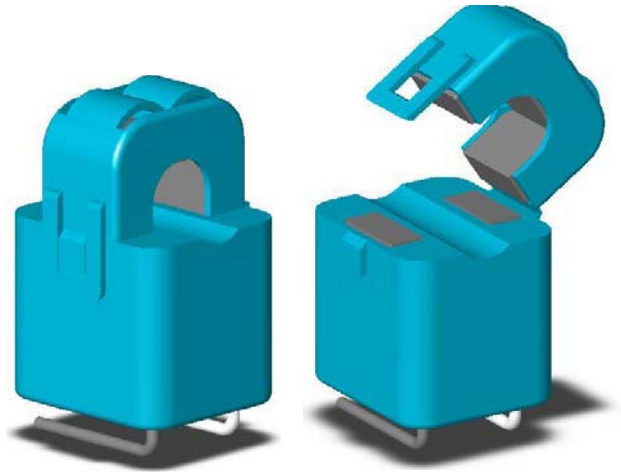


# Topstek AC Current Sensor TU10P-90A

## TU10P-90A

### 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 ~ 150 kHz) for accurate RMS measurement without DC component
- ◆ Wide measurement range (10mA ~ 90Amp AC)
- ◆ Good linearity for low current (10mA ~ 1A) 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

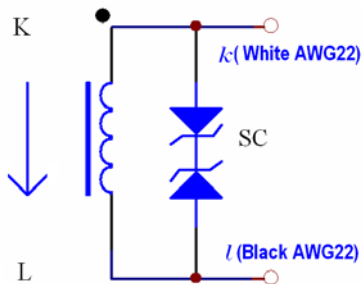
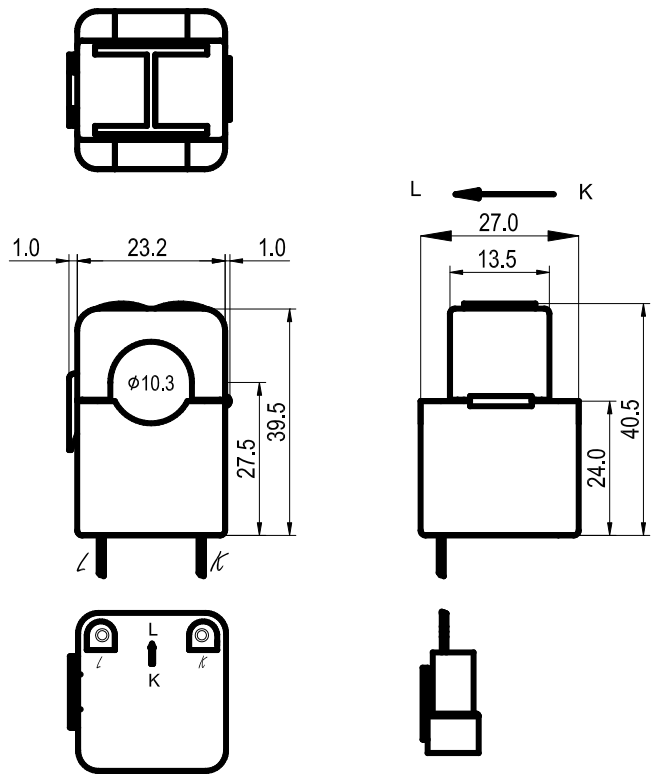


### Specifications

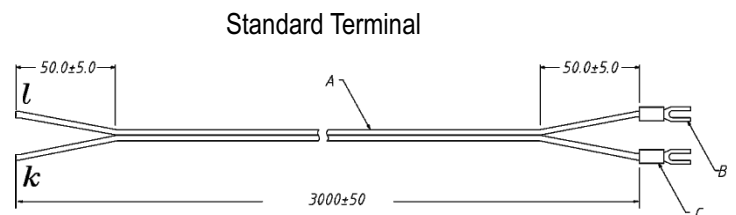
| Parameter                        | TU10P-90A   |
|----------------------------------|---|
| Rated Input Current Range        | 10mARMS~90ARMS (50Hz/60Hz)  |
| Max Continuous Current           | 120ARMS   |
| Linear Output Range              | 15.6V <sub>p-p</sub> or 5.5V <sub>RMS</sub>                           |
| Working Frequency Range          | 50Hz~150kHz   |
| No. of Secondary Turns           | 3000±2  |
| Secondary Coil Resistance        | 460±30Ω   |
| 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               | 48g   |

### Dimensions and pin identification

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



Equivalent Circuit Diagram



Option Y Terminal

