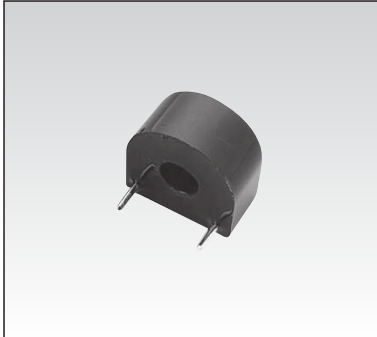


## Ultra small AC current sensor for PCB mounting horizontally

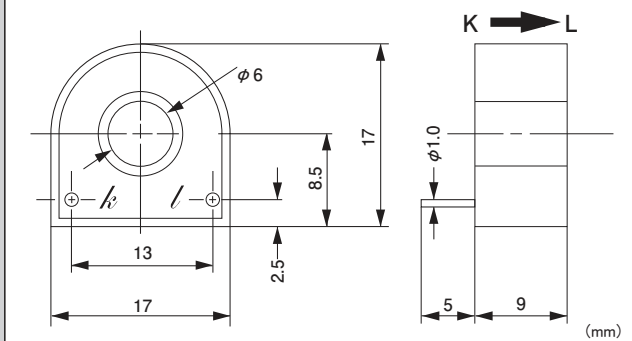


**Model** CTL-6-L

**[Features]**

- Straight pins for PCB mounting horizontally.
- The smallest model in CTL generic series for general measurement.
- Ensure aperture diameter ( $\phi 6$ ) in ultra small model. Mass approximately 5g, optimum for PCB mounting directly with the penetrated conductor.
- Covering the wide range until 40A maximum of primary current
- Possible to interface with electrical circuit directly by 800:1 high current ratio

**[Outline drawing]**

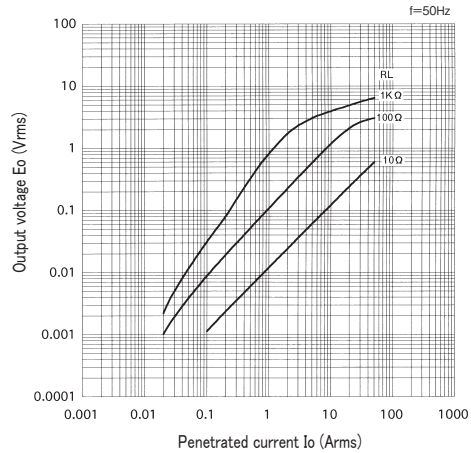


**[Specification] Ta=25°C**

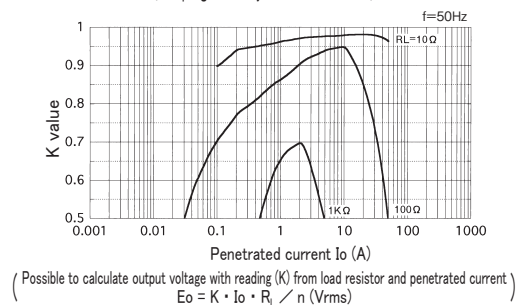
Model	CTL-6-L
Primary current	0.1 ~ 40Arms (50 / 60Hz)、 $R_L \leq 10\Omega$
Maximum primary current	60Arms continuous
Saturation limited current	60Arms (50 / 60Hz)、 $R_L \leq 1\Omega$
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	800±2turns
Secondary windings resistance	31Ω (reference)
Withstand voltage	AC2000V(50/60Hz), 1min(between aperture and output terminal in a lump)
Insulation resistance	DC500V, $\geq 100M\Omega$ (between aperture and output terminal in a lump)
Operating temperature	-20°C ~ +75°C, $\leq 80\%RH$ , no condensation
Storage temperature	-30°C ~ +90°C, $\leq 80\%RH$ , no condensation
Structure	PBT plastic case, potted by epoxy on one side
Output terminal	$\phi 1.0 \times 5L$ (hard copper pins), gold plating
Mass	approximately 5g

- Remark (1) Output voltage is changed by the penetrated current/load resistor/[K] characteristic and so on. Please set up the condition for use with careful investigation of each characteristic
- (2) Please use with enough margin if the range of coupling efficiency [K]  $\leq 0.9$ , because it is the range to happen the individual difference.
- (3) Opening the secondary during turn ON is hazardous and the cause of failure, because of generating high voltage
- (4) Please surely ask to our technical consulting service, if the power measurement is thought.
- (5) Please be careful of CT heating in case to use with high frequency, although this CT is basically used at 50/60Hz.

**[Output voltage characteristics]**



**[Coupling efficiency (K) characteristics]**



**[Frequency characteristics]**

