

Current Transformers



Outline

NEC TOKIN current transformers are AC sensing elements that are suitable for current control and overcurrent protection.

Features

- Compact, inexpensive, with high output voltages
- Broad-frequency bandwidths (50 Hz to 100 kHz)
- Easy mounting on printed circuit boards
- Use flame-retardant materials (UL94V-0 class)

Applications

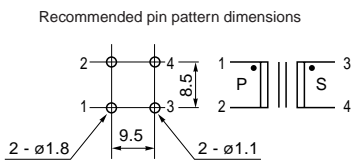
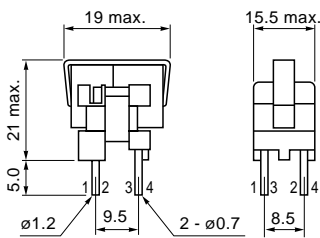
- Electromagnetic cooking appliances, microwave ovens, airconditioners and other home appliances
- Current regulation in office automation and industrial equipment
- High-frequency switching power supplies

Product Name	Direct Current Resistance (Ω) max.	Insulation Withstand Voltage (VAC/1min)	Insulation Resistance (MΩ) min.
CT10V1-02	3.9	1500	100
CT10H1-02	3.9	1500	100
CT10V1-15	230	1500	100
CT10H1-15	230	1500	100
CT10V1-10S	160	3750	100

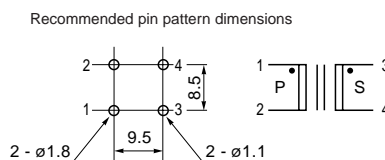
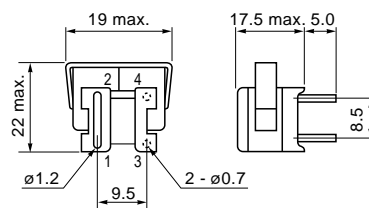
*Insulation Withstand Voltage: inter-coil, between coil and core. Insulation Resistance: DC500V, inter-coil, between coil and core

Shape and Dimensions

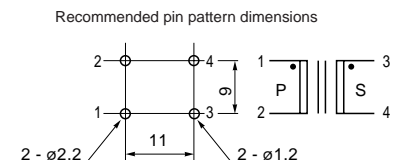
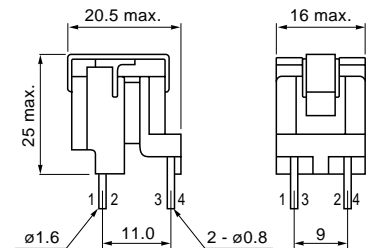
- CT10V1-02
- CT10V1-15



- CT10H1-02
- CT10H1-15



- CT10V1-10S



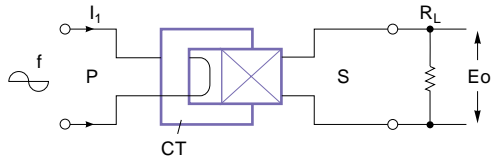
[mm]

Numbering System

CT10 V 1 - 15
 ① ② ③ ④

- ① Series
- ② Vertical type (V) or horizontal type (H)
- ③ Primary pass-through type or primary mounted type (1)
- ④ Number of windings 1500T

Output Voltage Measurement Circuit



f : Frequency
 I₁ : Primary current (AT)
 S : Secondary side
 R_L : Load resistor (Ω)
 E_o : Output voltage (V)
 P : Primary side

Output Voltage Characteristics

