

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







CT Series Low Current AC



Overview

The CT Series Low Alternating Current Sensors can be used to detect very low current levels and for overcurrent protection in electronic appliances.

Applications

Typical applications include overcurrent detection in microcontroller-based equipment, refrigerators, air conditioners, inductive heating, servo motors, inverters, UPSs and SMPS.

Benefits

- · High sensitivity
- · High performance
- · Compact and lightweight
- · Mountable on printed circuit boards

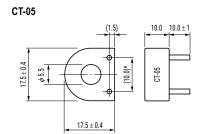


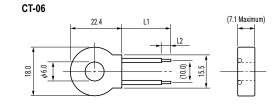
Ordering Information

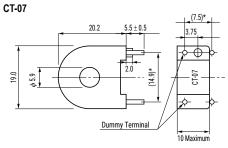
| CT- | 06- | 50 | |
|--------|----------------------|---|--|
| Series | Shape Classification | Number of Turns | |
| СТ | 05 06 07 | Blank (CT-05 only) = 500 turns 50 = 500 turns 100 = 1,000 turns | |



Dimensions in mm



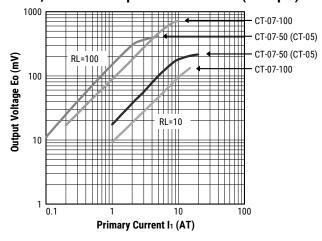




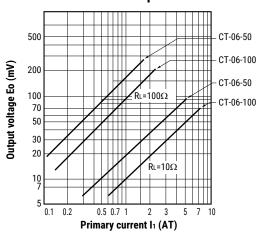
| Product Name | L1 (±5) | L2 (±2) |
|---------------------|---------|---------|
| CT-06-50 | 56.0 | 4.0 |
| CT-06-100 | 85.0 | 5.0 |

Output Characteristics

CT-05, CT-07 AC output characteristics (example)

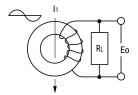


CT-06 AC output characteristics (example)





Measuring Circut



 $\begin{array}{ll} \text{I1} & : Primary current (AT) \\ \text{RL} & : Load resistance (\Omega) \\ \text{Eo} & : Output voltage (mV_{rms}) \end{array}$

Environmental Compliance

All CT sensors are RoHS compliant.

Table 1 - Ratings & Part Number Reference

| Part Number | Turns | Core | Lead Wires | Material |
|-------------|-------|-----------|--|--|
| CT-05 | 500 | Permalloy | φ0.6 mm pin connectors | Phenolic resin case, epoxy-filled |
| CT-06-50 | 500 | Permalloy | Polyethylene sheath φ0.5 mm single wire | Phenolic resin case, silicon-filled |
| CT-06-100 | 1,000 | Permalloy | Polyethylene sheath φ0.5 mm single wire | Phenolic resin case, silicon-filled |
| CT-07-50 | 500 | Permalloy | φ0.8 mm pin connectors | Phenolic resin case, epoxy-filled |
| CT-07-100 | 1,000 | Permalloy | φ0.8 mm pin connectors | Phenolic resin case, epoxy-filled |

Precautions

Before Using Low Alternating Current Sensors

- Do NOT drop or apply any other mechanical stress.
- Preliminary study is required when heating by current conduction.
- Do NOT use the Low Alternating Current Sensors opened between secondary output terminals. Heat build-up in the magnetic core may occur, resulting in damages to the parts by melting of the coil.



KEMET Electronic Corporation Sales Offices

For a complete list of our global sales offices, please visit www.kemet.com/sales.

Disclaimer

All product specifications, statements, information and data (collectively, the "Information") in this datasheet are subject to change. The customer is responsible for checking and verifying the extent to which the Information contained in this publication is applicable to an order at the time the order is placed.

All Information given herein is believed to be accurate and reliable, but it is presented without guarantee, warranty, or responsibility of any kind, expressed or implied.

Statements of suitability for certain applications are based on KEMET Electronics Corporation's ("KEMET") knowledge of typical operating conditions for such applications, but are not intended to constitute – and KEMET specifically disclaims – any warranty concerning suitability for a specific customer application or use. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by KEMET with reference to the use of KEMET's products is given gratis, and KEMET assumes no obligation or liability for the advice given or results obtained.

Although KEMET designs and manufactures its products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicted or that other measures may not be required.