

Speciality Magnetic Components QUALIFIED to ISO 9001:2008

PCB Mounting Hall Effect Current Transformer Type HTP25NP



The HTP25NP is a closed loop Hall Effect Current Transformer suitable for measuring currents up to 25A. The product provides an output current, galvanically isolated from the primary conductor into an external load resistance. All contacts, including the primary are designed for PCB mounting.

Features

- High Accuracy
- 2.5 kV Proof Stress
- Fast Response
- All Contacts via PCB
- Designed in Quality

Applications

- Variable Speed Drives
- UPS Systems
- D.C. Power Supplies
- Low Frequency Current Measurement

Benefits

- Small PCB Footprint
- Galvanic Isolation
- Ease of assembly
- · High Reliability
- Wide Dynamic Range
- Overcurrent Protection
- Robotics
- Frequency Inverters
- Power Factor Monitoring

TECHNICAL DATA

Nominal Primary Current 25A
Turns Ratio 1000:1
Nominal Power Supply ±15V ±5%

Power Supply Current 14mA per rail + output current

Minimum Load Resistance 100Ω Operating Temperature Range $0 \text{ to } +70 ^{\circ}\text{C}$ Storage Temperature Range $-25 ^{\circ}\text{C} \text{ to } +85 ^{\circ}\text{C}$

SPECIFICATION

Linearity 0.1% of nominal primary current.

Limit of Linearity ± 36A peak value

Overall Accuracy
Output Offset Current
Output Offset Current After Overload

0.5% of nominal primary current
<=100µA at primary current =0A
<=250µA at primary current =0A

Zero Offset/Temperature <5μΑ/°C Zero Offset/Supply Variation <5μΑ/V

Coil resistance 52 Ω

Bandwidth (-1dB) dc to 150kHz min.

 $\begin{array}{ll} \mbox{di/dt following} & >100\mbox{A/}\mu\mbox{s} \\ \mbox{Delay Time} & 0.1\mu\mbox{S} \\ \mbox{dV/dt Immunity} & 10\mbox{kV/}\mu\mbox{s} \end{array}$

Proof Stress Voltage 2.5kV a.c., rms, 50Hz for 1 minute, Primary pins to output

terminals

GENERAL DATA

Weight 24g nominal

Housing Modified Polyphenylene Oxide Mounting Direct mounting to PCB by 13 pins

Primary Conductor Material Copper Tin Plated

Signal Sense Positive output obtained when current flows from pins 1-5 to pins

6-10

DIMENSIONS

