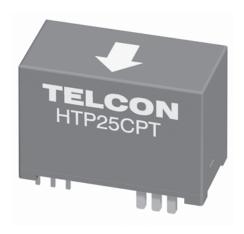


Speciality Magnetic Components

Qualified to ISO 9001:2000

Miniature Hall Effect Current Transformer Type HTP25CPT



The HTP25CPT is a closed loop Hall Effect Current Tr ansformer suitable for measuring currents up to 25A. The product provides an output current into an external load resistance which is galvanically isolated from the primary conductor. All contacts, including the primary, are designed for PCB mounting.

The HTP25CPT complements the existing HTP range giving comparable accuracy in a substantially smaller volume, and a smaller footprint. There are three separate primary conductors which can be connected in parallel to give the full rated current or in series to give a lower rated current without sacrificing relative offset performance.

Features

- Miniature Package
- 5 kV Proof Stress
- Fast Response
- 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
- High Accuracy
- Ease of assembly
- High Reliability
- Overcurrent Protection
- Robotics
- Frequency Inverters
- Power Factor Monitoring

TECHNICAL DATA

Nominal Primary Current 25A Measurement Range ±60A peak Turns Ratio 1000:1 **Nominal Power Supply** ±15V ±5%

Power Supply Current 16mA per rail + output current

Minimum Load Resistance 0 to 150 Ω **Operating Temperature Range** 0 to +85°C Storage Temperature Range -25°C to +90°C

SPECIFICATION

Linearity 0.1% of nominal primary current. **Overall Accuracy** 0.5% of nominal primary current **Output Offset Current** <±100µA at primary current =0A Output Offset Current After Overload <±250µA at primary current =0A

Zero Offset/Temperature <3µA/°C Zero Offset/Supply Variation <2µA/V Coil resistance at 25°C 40 Ω Primary Conductor Resistance (each conductor) 300μΩ

Bandwidth (-1dB) dc to 70kHz di/dt following >50A/us **Delay Time** 0.4µS dV/dt Immunity 10kV/us

Proof Stress Voltage 5kV a.c., rms, 50Hz for 1 minute

Creepage Distance 7.4mm Clearance Distance 7.4mm

GENERAL DATA

Weight 11.4g nominal

Housing PBT 15% Glass Filled

Flammability Rating V0, CTI Rating >140 Mounting

Direct mounting to PCB by 9 pins

Primary Conductor Material Copper Tin Plated

Signal Sense Positive output obtained when current flows in direction of

arrow

DIMENSIONS

