



Speciality Magnetic Components  
QUALIFIED to ISO 9001:2008

## Miniature Hall Effect Current Transformer Type HTP100CPT/2K



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The HTP100CPT/2K is a closed loop Hall Effect Current Transformer suitable for measuring currents up to 100A. 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 HTP100CPT/2K 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.

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### **Features**

- Miniature Package
- 5 kV Proof Stress
- Fast Response
- Contacts via PCB
- Designed in Quality

### **Benefits**

- Small PCB Footprint
- Galvanic Isolation
- High Accuracy
- Ease of assembly
- High Reliability

### **Applications**

- Variable Speed Drives
- UPS Systems
- D.C. Power Supplies
- Low Frequency Current Measurement
- Overcurrent Protection
- Robotics
- Frequency Inverters
- Power Factor Monitoring

## TECHNICAL DATA

Nominal Primary Current	100A
Measurement Range	±160A peak
Turns Ratio	2000:1
Nominal Power Supply	±15V ±5%
Power Supply Current	16mA per rail + output current
Minimum Load Resistance	33 to 65 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	64 Ω
Primary Conductor Resistance (each conductor)	50µΩ
Bandwidth (-1dB)	dc to 70kHz
di/dt following	>50A/µs
Delay Time	0.4µS
dV/dt Immunity	10kV/µs
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

