



Speciality Magnetic Components  
QUALIFIED to ISO 9001:2008

## PCB Mounting Hall Effect Current Transformer Type HTP100



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The HTP100 is a closed loop Hall Effect Current Transformer suitable for measuring currents up to 100A. The product provides an output current, galvanically isolated from the primary conductor into an external load resistance.

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### Features

- High Accuracy
- 3 kV Proof Stress
- Fast Response
- Designed in Quality

### Applications

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

### Benefits

- Galvanic Isolation
- Ease of assembly
- High Reliability
- Non Invasive
- Overcurrent Protection
- Robotics
- Frequency Inverters
- Power Factor Monitoring

## TECHNICAL DATA

Nominal Primary Current	100A
Turns Ratio	1000:1
Nominal Power Supply	$\pm 15V \pm 5\%$
Power Supply Current	16mA per rail + output current
Minimum Load Resistance	45 $\Omega$
Operating Temperature Range	0 to +70°C
Storage Temperature Range	-25°C to +85°C

## SPECIFICATION

Linearity	0.1% of nominal primary current.
Limit of Linearity	$\pm 180A$ peak value
Overall Accuracy	0.5% of nominal primary current
Output Zero Adjustment	$< \pm 500\mu A$ at primary current = 0A
Zero Offset/Temperature	$< 5\mu A/^{\circ}C$
Zero Offset/Supply Variation	$< 5\mu A/V$
Coil resistance	20 $\Omega$
Bandwidth (-1dB)	dc to 100kHz min.
di/dt following	$> 150A/\mu s$
Delay Time	0.1 $\mu s$
dV/dt Immunity	10kV/ $\mu s$
Proof Stress Voltage	3kV a.c., rms, 50Hz for 1 minute, bore to output terminals

## GENERAL DATA

Weight	45g nominal
Housing	Modified Polyphenylene Oxide
Mounting	Direct mounting to PCB by 5 pins
Signal Sense	Positive output obtained when current flows in direction of arrow
Conductor Temperature	The temperature of the primary conductor should not exceed 100°C
Conductor Position	Optimum dynamic performance is achieved with a single conductor filling the bore

## DIMENSIONS

