

# Speciality Magnetic Components QUALIFIED to ISO 9001:2008

# PCB Mounting Hall Effect Current Transformer Type HTP100/2K



The HTP100/2K 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.

## **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 2000:1 **Nominal Power Supply** 

±15V ±5%

**Power Supply Current** 16mA per rail + output current Minimum Load Resistance

20 Ω **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 ± 200A peak value

**Overall Accuracy** 0.5% of nominal primary current Output Zero Adjustment <±500µA at primary current =0A

Zero Offset/Temperature <5µA/°C Zero Offset/Supply Variation <5µA/V Coil resistance 60 Ω

Bandwidth (-1dB) dc to 100kHz min.

di/dt following >50A/µs **Delay Time**  $0.1 \mu S$ dV/dt Immunity 10kV/µs

**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

Conductor Position Optimum dynamic performance is achieved with a single

conductor filling the bore

