



Speciality Magnetic Components
QUALIFIED to ISO 9001:2008

PCB Mounting Hall Effect Current Transformer Type HTP50NPVA



The HTP50NPVA is a compact, multiple primary turn closed loop Hall Effect Current Transformer suitable for measuring currents up to 50A. It is designed for those applications where connection to the primary circuit is made directly on the printed circuit board.

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

Benefits

- Small PCB Footprint
- Galvanic Isolation
- Ease of assembly
- High Reliability
- Wide Dynamic Range

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	50A
Turns Ratio	1000:1
Nominal Power Supply	$\pm 15V \pm 5\%$
Power Supply Current	14mA per rail + output current
Minimum Load Resistance	90 Ω
Operating Temperature Range	0 to +70°C
Storage Temperature Range	-25°C to +85°C

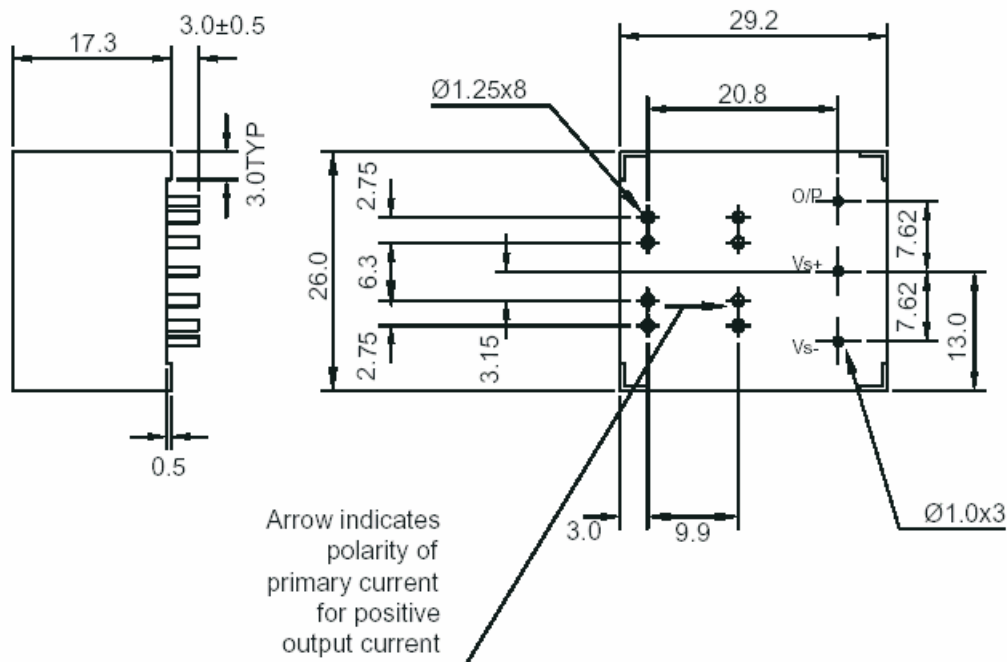
SPECIFICATION

Linearity	0.1% of nominal primary current.
Limit of Linearity	$\pm 75A$ peak value
Overall Accuracy	0.5% of nominal primary current
Output Offset Current	$< \pm 125\mu A$ at primary current = 0A
Output Offset Current After Overload	$< \pm 250\mu A$ at primary current = 0A
Zero Offset/Temperature	$< 5\mu A/^{\circ}C$
Zero Offset/Supply Variation	$< 5\mu A/V$
Coil resistance	52 Ω
Bandwidth (-1dB)	dc to 150kHz min.
di/dt following	$> 100A/\mu s$
Delay Time	0.1 μs
dV/dt Immunity	10kV/ μs
Proof Stress Voltage	2.5kV a.c., rms, 50Hz for 1 minute, Primary pins to output terminals

GENERAL DATA

Weight	26g nominal
Housing	Modified Polyphenylene Oxide
Mounting	Direct mounting to PCB by 11 pins
Primary Conductor Material	Copper Tin Plated
Signal Sense	A positive output is obtained when current flows in the direction of the arrow shown on the diagram below

DIMENSIONS



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