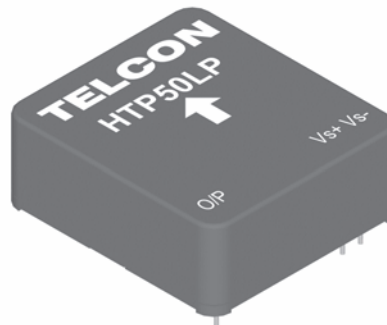




Speciality Magnetic Components
QUALIFIED TO ISO 9001:2008

Hall Effect Current Transformer Type HTP50LP



The HTP50LP is a closed loop Hall Effect Current Transformer suitable for measuring currents up to 50A. The product provides an output current into an external load resistance, galvanically isolated from the three primary conductors. The three conductors are electrically isolated and are normally connected in parallel. Series connection can be used to achieve different transformation ratios.

The HTP50LP has similar performance to the HTP50NPS but is only 11.3mm high.

Features Benefits

- High Accuracy
- 5kV Proof Stress
- Fast response
- Designed-in Quality
- Galvanic Isolation
- Wide Dynamic Range
- Non - Invasive
- High reliability

Applications

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

As part of our policy of continuous product improvement, we reserve the right to make modifications to this product without prior notice.

TECHNICAL DATA

ELECTRICAL

Nominal Primary Current	50A
Turns Ratio	1000:1
Nominal Power Supply	$\pm 15V \pm 5\%$
Supply Current	16mA per rail + output current
Minimum Load Resistance	90 Ω
Operating Temperature Range	0 to +70°C
Storage Temperature Range	-25°C to +90°C

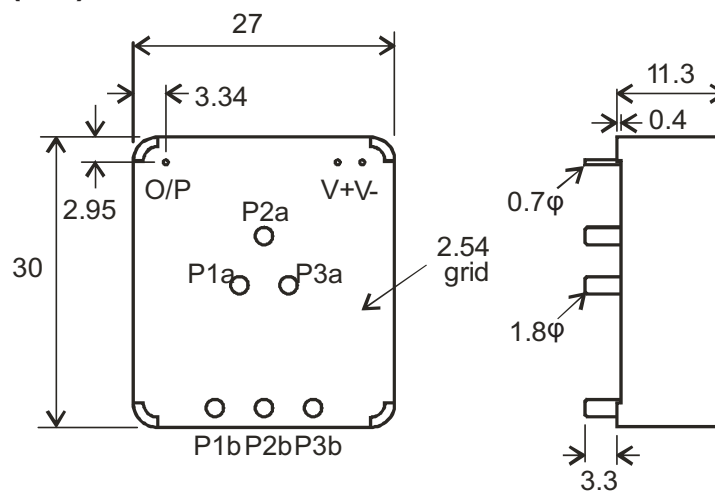
SPECIFICATION

Linearity	0.1% of nominal primary current
Limit of Linearity	$\pm 80A$ peak
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 at 25°C	40 Ω
Primary Resistance (all in parallel)	88 $\mu\Omega$
Bandwidth (1dB)	DC to 200kHz
di/dt following	$> 200A/\mu s$
Delay time	0.1 μs
dV/dt Immunity	10kV/ μs
Proof Stress Voltage	5kV a.c., r.m.s, 50Hz for 1minute
Creepage Distance	8.4mm
Clearance Distance	8.4mm

GENERAL DATA

Weight	16g nominal
Housing	25% Glass Filled Nylon 66 Flammability Rating UL94 V0 , CTI Rating >600
Mounting	Direct mounting to PCB by 9 pins
Signal Sense	Positive output obtained when current flows as shown by arrow.

DIMENSIONS (mm)



Rev.04/07