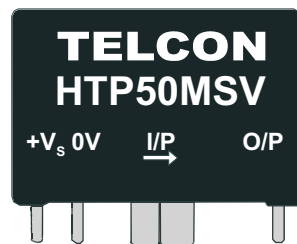


Hall Effect Current Transformer : HTP50MSV



The new single supply voltage HTP50MSV is an addition to the Telcon range of Hall Effect Current Transformers. These new devices are designed for unidirectional current measurement and require a single +15V power supply. They are PCB mounting and are pin compatible with the proven and successful HTP50M previously supplied by Telcon. The units are based on the 'closed loop' principle of operation.

Features

- Single Supply Voltage
- 3.25kV Proof Stress
- Fast Response
- All Contacts Via PCB
- Designed In Quality

Benefits

- Small PCB Footprint
- Galvanic Isolation
- Competitively Priced
- Semiconductor Protection
- High Reliability

Applications

- Variable Speed Drives
- UPS Systems
- D.C Power Supplies
- Low Frequency Current Measurement
- Overcurrent Protection
- Robotics
- Ground Fault Detection
- Frequency Inverters

TECHNICAL DATA

Nominal Primary Current	50A dc (see Note 1)
Turns Ratio	1000:1 (see Note 1)
Nominal Power Supply	+15V \pm 5%
Supply Current	16mA per rail + output current
Load Resistance	47 to 78 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	+75A dc
Overall accuracy	0.5% of nominal primary current
Output Offset Current	< \pm 200 μ A at primary current =+0.25A dc
Zero Offset /Temperature	< \pm 5 μ A/°C (typical)
Zero Offset/Supply Variation	< 5 μ A/V
Coil Resistance	59 Ω
Primary Conductor Resistance	60 $\mu\Omega$
Bandwidth (-1dB)	d.c. to 25kHz
di/dt following	>50A/ μ s
Delay time	1.2 μ s
dV/dt Immunity	10kV/ μ s
Proof Stress Voltage	3.25kV a.c., r.m.s, 50Hz for 1minute
Creepage Distance	4.3mm
Clearance Distance	4.3mm

GENERAL DATA

Weight	12g nominal
Housing	PBT 15% Glass Filled. Flammability Rating V0, CTI Rating >140
Mounting	Direct mounting to PCB by 5 pins
Primary conductor material	Copper Tin Plated
Signal Sense	Positive output obtained when current flows as shown in Connection Diagram.

Note 1: Variants of this product are also available with the following turns ratios:- 500:1, 333:1, 250:1, and 200:1 as the HTP25MSV, HTP18MSV, HTP12MSV and HTP10MSV respectively.

