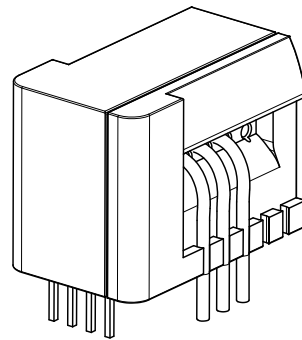


For the electronic measurement of current: DC, AC, pulsed..., with galvanic isolation between the primary and the secondary circuit.



Features

- Closed loop (compensated) multi-range current transducer
- Voltage output
- Single supply
- Isolated plastic case material recognized according to UL 94-V0
- Compact design for PCB mounting.

Advantages

- Very low temperature coefficient of offset
- Very good dv/dt immunity
- LTSR compatible footprint
- Reduced height
- Reference pin with two modes: Ref IN and Ref OUT
- Extended measuring range for unipolar measurement.

Applications

- AC variable speed and servo motor drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications
- Solar inverters.

Standards

- EN 50178
- UL 508
- IEC 61010-1 (safety).

Application Domain

- Industrial.

Absolute maximum ratings

| Parameter | Symbol | Unit | Value |
|------------------------------------|--------------|------|--------------------|
| Supply voltage | V_C | V | 7 |
| Primary conductor temperature | | °C | 110 |
| Maximum primary current | $I_{P\ max}$ | A | $20 \times I_{PN}$ |
| ESD rating, Human Body Model (HBM) | | kV | 4 |

Stresses above these ratings may cause permanent damage. Exposure to absolute maximum ratings for extended periods may degrade reliability.

Isolation characteristics

| Parameter | Symbol | Unit | Value | Comment |
|--|-------------|------|-----------------------|---|
| RMS voltage for AC isolation test 50/60Hz/1 min | V_d | kV | 4.1 | |
| Impulse withstand voltage 1.2/50 μ s | \hat{V}_w | kV | 7.5 | |
| Partial discharge extinction voltage @ 10 pC (rms) | V_e | V | 1000 | |
| Clearance distance (pri. - sec.) | dCl | mm | 7.5 | Shortest distance through air |
| Creepage distance (pri. - sec.) | dCp | mm | 7.5 | Shortest path along device body |
| Creepage distance (pri. .- sec.) | dCp | mm | 6.2 | When mounted on PCB with recommended layout |
| Case material | - | - | V0 according to UL 94 | |
| Comparative tracking index | CTI | V | 600 | |
| Application example | - | - | 300 V CAT III PD2 | Reinforced isolation, non uniform field according to EN 50178, EN 61010 |
| Application example | - | - | 600 V CAT III PD2 | Simple isolation, non uniform field according to EN 50178, EN 61010 |
| According to UL 508: primary potential involved in Volts RMS AC or DC | - | V | 600 | For use in a pollution degree 2 environment |

Environmental and mechanical characteristics

| Parameter | Symbol | Unit | Min | Typ | Max | Comment |
|-------------------------------|---|------|-----|-----|-----|---------|
| Ambient operating temperature | T_A | °C | -40 | | 85 | |
| Ambient storage temperature | T_S | °C | -55 | | 105 | |
| Mass | m | g | | 9 | | |
| Standards | EN 50178, IEC 60950-1, IEC 61010-1, IEC 61326-1, UL 508 | | | | | |