

AEC-Q200 Qualified Thick Film Power Resistor in Clip-Mount TO-247 Package for Direct Mounting on a Heatsink Offers Enhanced Protection Against Short Transient Pulses, Combining High Pulse Absorption to 75 J/0.1 s With Power Dissipation of 150 W

Product Benefits:

- AEC-Q200 qualified
- High pulse absorption to 75 J/0.1s
- Clip-mount TO-247 package for direct mounting on a heatsink
- High power dissipation of 150 W
- High temperature operation to +175 °C
- Broad range of resistance values from 1 Ω to 2.2 k Ω
- Tolerances down to $\pm 2\%$
- Non-inductive design
- Available with bended termination options



Market Applications:

- Precharge or discharge resistor for controls, 48 V board nets, BMS, fuel cells, and on-board chargers for HEVs, EVs, and low speed electric vehicles; energy monitoring and metering systems; agricultural vehicles and farm equipment; industrial motor drives, welding equipment, and power tools; switches, routers, and optical network equipment; and weapons guidance systems.

The News:

Vishay Intertechnology announces that it has extended its LTO series of thick film power resistors with a new AEC-Q200 qualified device that delivers higher pulse absorption up to 75 J/0.1s. Offered in a clip-mount TO-247 package for direct mounting on a heatsink, the Vishay Sfernice LTO 150H offers high power dissipation of 150 W at a +45 °C case temperature.

- The LTO 150H features a unique design that provides 30 % higher energy absorption than existing LTO series devices for enhanced protection against short transient pulses. The result is more stable operation in high stress environments, reducing the risk of failure and improving overall system reliability
- The resistor's high power dissipation and low thermal resistance of 0.87 °C/W further enhance its ability to deliver consistent performance and safeguard sensitive components, while allowing fewer devices to be utilized – saving board space, simplifying layouts, and reducing overall solution costs

The Key Specifications:

- Rated power at +45 °C: 150 W
- Thermal resistance: 0.87 °C/W
- Operating temperature: -55 °C to +175 °C
- Resistance range: 1 Ω to 2.2 k Ω
- Tolerances: $\pm 2\%$, $\pm 5\%$, and $\pm 10\%$
- Temperature coefficient: ± 200 ppm/°C, ± 350 ppm/°C, and ± 900 ppm/°C



NEW PRODUCT INFORMATION

Product Group: Vishay Sfernice, Thick Film / April 2025



Availability:

Samples and production quantities of the LTO 150H are available now, with lead times of 10 weeks.

To access the product datasheet on the Vishay Website, go to

<http://www.vishay.com/ppg?50084> (LTO 150H)

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