



# Series LHP-150 TO-247

150 W Thick Film Resistor for high-frequency and pulse-loading applications

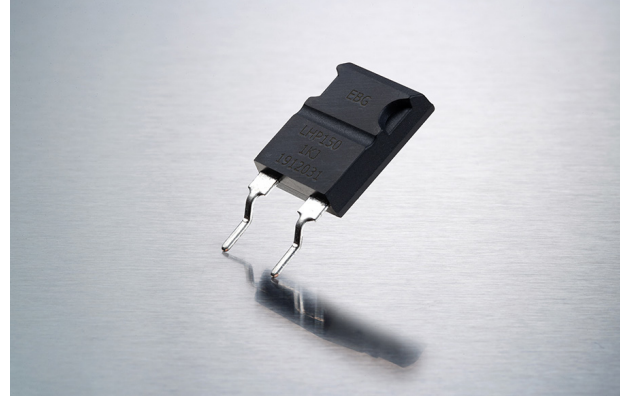


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Miba Resistors offers the completely encapsulated and insulated TO-247 package for low ohmic value and Non-Inductive design for high-frequency and pulse-loading applications. Ideal use for power supplies. The LHP-150 series is rated at 150 W mounted to a heat sink.

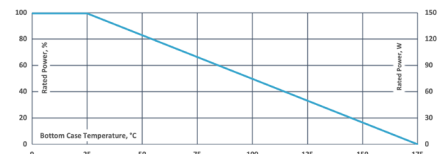
## Features

- 150 W operating power
- **TO-247 package** configuration
- Resistor package completely insulated from heat sink
- Non-Inductive design



## Technical Specifications

|                                  |  |
|----------------------------------|--|
| <b>Resistance value</b>          | 0.2 Ω ≤ 1 MΩ   |
| <b>Resistance tolerance</b>      | ±5 % to ±10 %<br>±0.5 % on special request for limited ohmic values  |
| <b>Temperature coefficient</b>   | ±150 ppm/°C<br>(+25°C to +105°C, ref. to +25°C)  |
| <b>Power rating</b>              | 150 W at 25°C bottom case temperature  |
| <b>Maximum operating voltage</b> | 700 V DC   |
| <b>Dielectric strength</b>       | 1800 V AC  |
| <b>Insulation resistance</b>     | min. 10 GΩ   |
| <b>Momentary overload</b>        | 2 times rated power, but no more than 1.5 time max. continuous operating voltage, last 5s, ΔR ≤ ±(0.5% R + 0.001Ω) |
| <b>Load life</b>                 | 2,000 hours at rated power, MIL-R-39009D<br>ΔR ≤ ±(1.0% R + 0.001Ω)  |
| <b>Moisture resistance</b>       | MIL-Std.-202, method 106,<br>ΔR ≤ ±(0.5% R + 0.001Ω)   |
| <b>Thermal shock</b>             | MIL-Std.-202, method 107, Cond. F<br>ΔR ≤ ±(0.3% R + 0.001Ω)   |
| <b>Terminal strength</b>         | MIL-Std.-202, method 211, Cond. A (pull test)<br>2.4 N ΔR ≤ ±(0.2% R + 0.001Ω)                                     |
| <b>Vibration, high frequency</b> | MIL-Std.-202, method 204, Cond. D<br>ΔR ≤ ±(0.2% R + 0.001Ω)   |
| <b>Working temperature</b>       | -55°C to +175°C  |
| <b>Lead material</b>             | tinned copper  |
| <b>Weight</b>                    | ~4 g   |



Derating (thermal resist.) LHP-150:  
1.00 W/K (1.0 K/W)

Without a heat sink, when in open air at 45°C, the LHP-150 is rated for 4.5 W.

## How to make a request

LHP-150\_Ohmic Value\_Tolerance

For example:  
LHP-150 50R 5%

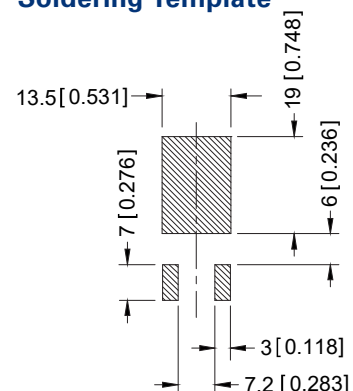
## Application Standard

- IEC60115-1 : 2001 (GB/T5729-2003)
- MIL-STD-202
- MIL-R-39009D

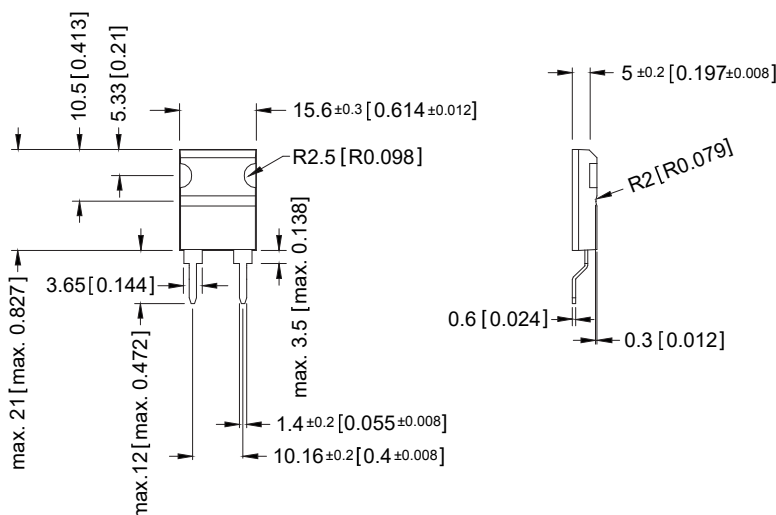
### Soldering Note:

During surface mount soldering, the soldering temp. profile **must not** cause the metal tab of this device to **exceed 245°C**.

## Soldering Template



## Dimensions in mm [inches]





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