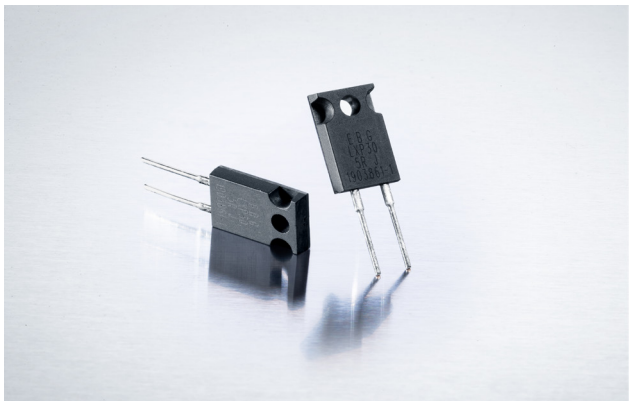
Series LXP-30 TO-220

30 W Thick Film Resistor designed for high-frequency and pulse-loading applications.

Updated model for our LXP-18 and LXP-20 series

Miba Resistor offers the totally encapsulated and insulated TO-220 package for low ohmic value and Non-Inductive design for high-frequency and pulse-loading applications. Ideal use for power supplies. The LXP-30 series is rated at 30 W mounted to a heat sink.

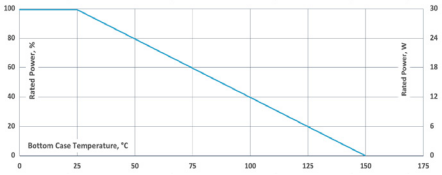


Features

- 30 W operating power
- **TO-220 package** configuration
- Single-screw mounting simplifies attachment to heat sink
- A totally Wed housing for enviromental protection
- Fully isolated heat sink
- Non-Inductive design
- Pulse load capability

Technical Specifications

Resistance value	0.05 Ω ≤ 1 MΩ (other values on request)
Resistance tolerance	±1 % to ±10 % ±0.5 % on special request for limited ohmic values
Temperature coefficient	>10 Ω ±50 ppm/°C 1 Ω to 10 Ω ±100 ppm/°C + 0.002 Ω (referenced to 25 °C, ΔR taken at ~105°C)
Power rating	30 W at 25°C bottom case temperature depends on case temperature (see power rating curve)
Maximum operating voltage	420 V DC
Dielectric strength voltage	1,800 V AC
Insulation resistance	> 10 GΩ at 1,000 V DC
Momentary overload	2x rated power with applied voltage not to exceed 1.5x maximum continuous operating voltage for 5 sec. ΔR ±(0.3 % + 0.001 Ω) max.
Load life	MIL-R-39009D, 2,000 hours at rated power, ΔR ±(1.0 % + 0.001 Ω) max.
Moisture resistance	MIL-STD-202, method 106 ΔR ±(0.5 % + 0.001 Ω) max.
Thermal shock	MIL-STD-202, method 107, Cond. F, ΔR ±(0.3 % + 0.001 Ω) max.
Terminal strength	MIL-STD-202, method 211, Cond. A (Pull Test) 2.4 N, ΔR ±(0.2 % + 0.001 Ω) max.
Vibration, high frequency	MIL-STD-202, method 204, Cond. D, ΔR ±(0.2 % + 0.001 Ω) max.
Lead material	anti-oxidation tinned copper wire
Mounting	M3 screw, max. torque 0.9 Nm
Working temperature	-55°C ~ +150°C



Derating (thermal resist.) LXP-30:
0.24 W/K (4.17 K/W)

Without a heat sink, when in open air at 25°C, the LXP-30 is rated for 2.25 W. Derating for temperature above 25°C is 0.018 W/K.

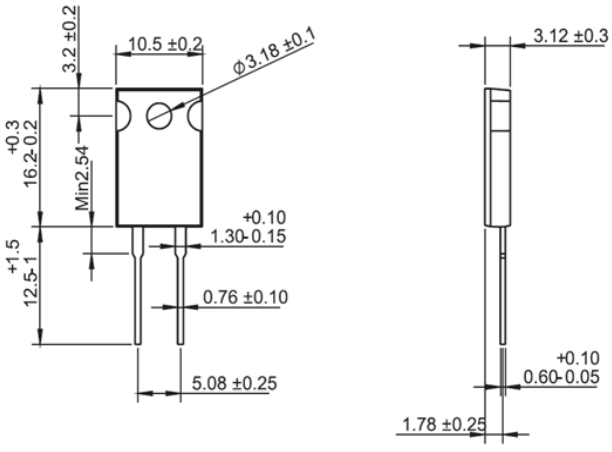
In case temperature is to be used for the definition of the applied power limited. The case temperature measurement must be made with a thermocouple contacting the center of the component mounted on the designed heat sink. Thermal grease should be applied properly.

How to make a request

LXP-30_Ohmic Value_Tolerance

For example:
LXP-30 50R 5%

Dimensions in mm



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