Series LPP 250

250 W Power Resistor at 85°C Bottom Case

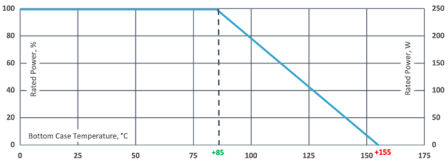
Miba Resistors general medium power resistor. Main applications are variable speed drives, power supplies, control devices, telecom, robotics, motor controls and other switching designs. Specials and custom designed components on request.

Features

- multiple resistors in 1 package
- Non-Inductive design
- ROHS compliant
- Materials in accordance with UL 94 V-0
- Thermal interface management available (ask for details)
- Version: fast-on (F) / solder pin (SP) / cable (C) possible (ask for details)

Technical Specifications

Resistance value	on request
Resistance tolerance	±1 % to ±10 %
Temperature coefficient	±250 ppm/°C (at +85°C ref. to +25°C) lower TCR on special request for limited ohmic values
Power rating	up to 250 W at 85°C bottom case temperature (see configurations)
Short time overload	1.25x rated power at 85°C bottom case temperature for 10 s., ΔR = 0.4% max. (for conf. 1, 2 and 3)
Operating working voltage	1000 V DC up to 2000 V = "S"-version up to 2000 V + higher pulse capability = "U"-version
Partial discharge	up to 2000 Vrms / 80pC (tests only on special request)
Voltage proof	dielectric strength up to 4000 V DC against ground
Insulation resistance	> 10 GΩ at 1000 V DC
Isolation voltage betweeen R1 & R2 & R3	500 V DC (1000 V DC on special request)
Heat resistance to cooling plate	Rth < 0.35 K/W
Capacitance/mass	45 pF (typical), measuring frequency 10 kHz
Serial inductivity	LPP-250 typical 40 nH, measuring frequency 10 kHz
Working temperature range	-55°C to +155°C
Mounting - torque for base plate (static)	1.3 Nm to 1.5 Nm M4 screws
Weight	~23g



Derating (thermal resist.) LPP-250:
2.86 W/K (0.35 K/W) (for conf. 1, 2 and 3)

Best results can be reached by using a thermal transfer compound with a heat conductivity of at least 1 W/mK. The flatness of the cooling plate must be better than 0.05 mm overall. Surface roughness should not exceed 6.4 µm.

How to make a request

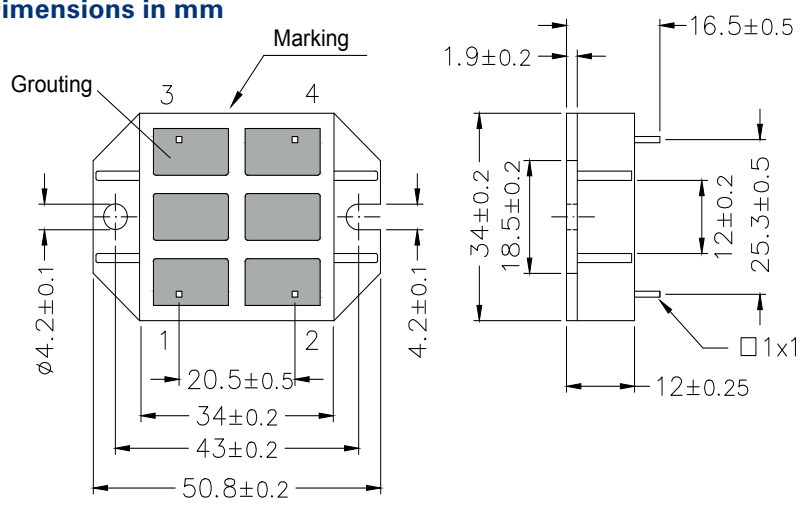
LPP-250-Configuration_Ohmic Value_ Tolerance

For example:
LPP-250-1 4R7 5%

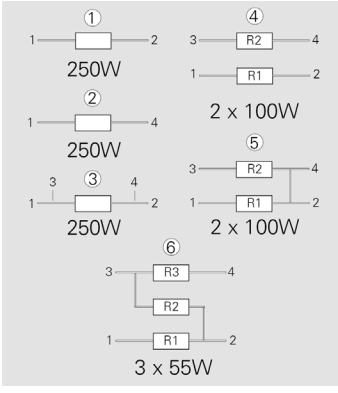
Example for higher working voltage:
LPP-250-1-S 4R7 10%

"S"-version: special trimming process
"U"-version: untrimmed

Dimensions in mm



Configurations (P / package)



Version 5: ohmic value between contact 2 and 4 aprox. 3mΩ

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