LSPA250 High Power Thick Film Resistor

Product overview

250 W thick film power resistor for power supply control, motor control, variable-speed drives, inverters and robotic systems.



Features

- Non-inductive design and wide resistance range.
- 250 W rated power at bottom-case center temperature ≤85°C.
- 6 kV voltage withstand; inductance <80 nH.
- M4 terminal screws; maximum torque 2 N·m.
- M6 heatsink mounting screws; maximum torque 3 N·m.

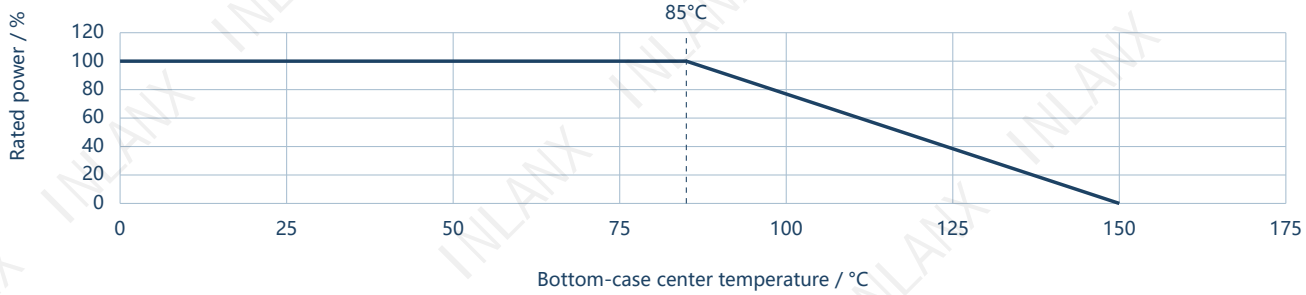
Performance characteristics

Item	Specification
Power rating condition	250 W at 85°C bottom-case center temperature
Maximum working voltage	5 kV
Operating temperature	-55°C ~ +155°C
Weight	91 g ±5 g

Resistance range	TCR / ppm/°C	Tolerance
R ≤1 Ω	±500	±10%
1 Ω < R ≤10 Ω	±300	±5%
R >10 Ω	±150	±5%

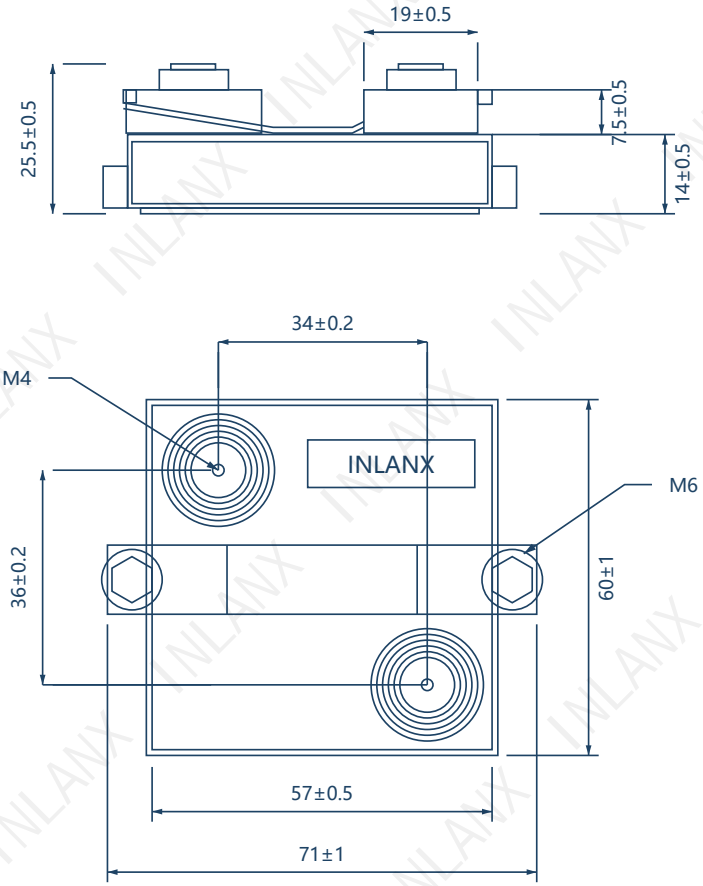
The stated power rating requires a heatsink. Special specifications are available by agreement.

Power derating



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Dimensions and construction • mm



Characteristics and tests

Test item	Requirement	Method / clause
Short-time overload	ΔR ≤ ±(0.25%R + 0.05 Ω)	1.5 × rated power, 10 s; 4.13
Rapid temperature change	ΔR ≤ ±(0.5%R + 0.05 Ω)	4.19
Climatic sequence	ΔR ≤ ±(1%R + 0.05 Ω)	4.23
Damp heat, steady state	ΔR ≤ ±(0.5%R + 0.05 Ω)	4.24
Load life	ΔR ≤ ±(1%R + 0.05 Ω)	4.25.2

Test clauses follow GB/T 5729-2003 and IEC 60115-1:2001 as cited in the source. R denotes nominal resistance; ΔR denotes resistance change after testing.