ESP62 Series Cylindrical Non-Inductive Power Resistors

High pulse absorption · Non-inductive · High temperature resistance · Compact

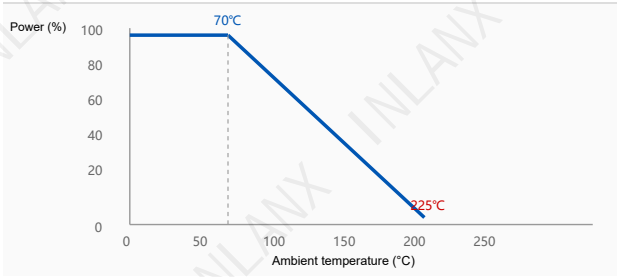
For installation without forced air cooling (fans improve cooling). Designed to absorb large pulse energy in a short time. Features a non-inductive design, high heat capacity, high temperature resistance, compact size and stable performance. Suitable for discharging random high-energy pulses and braking variable-frequency motors.

Technical Features

- Pulse load tested in an RC circuit; see parameters below.
- Special construction: thick-film resistor wound on a high-quality 96% cylindrical ceramic substrate. Crimped brass end caps each have an M4 threaded hole for electrical connection and mounting.
- Excellent pulse load capability
- Raw materials meet UL94-V0



Power Derating Curve



Dimensional Drawing



M4 threaded holes at both ends; depth 7.5mm.

Specifications

Item	Specification
Resistance range	10Ω ~ 1KΩ (other values available by agreement)
Tolerance	±5% ~ ±10%
Temperature coefficient	±250ppm/℃ (25℃ ~ 85℃)
Heat capacity	ESP62/14: 0.031 KJ/℃ ESP62/20: 0.063 KJ/℃
Max. surge voltage	1500V
Rated power (70°C)	ESP62/14: 30W ESP62/20: 40W
Resistor mounting	M4 screws; max. torque 3Nm.

Technical Parameters

Model	Power at 70°C (W)	Time constant = 0.5S	A (mm) ±0.50/±0.02	ΦB (mm) ±0.50/±0.02
ESP62/14	30	E = 2000J / pulse	62.0/2.44	15.0/0.59
ESP62/20	40	E = 2800J / pulse	62.0/2.44	21.0/0.83

Ordering Example

Model	Resistance	Tolerance
ESP62/20	100R	5%