

HIGH POWER CHIP RESISTOR RNP-45



Rated Power **45W**

0.3 g Light Weight

1mm Great Thinness



Performance

Designed to replace TO252 (DPAK) packaged resistors, RNP-45 operates at 45 watts with this small and light weight structure. Good performance at thermal resistance that rates only 1.0 °C/W. Resistive is made of pulse resistant thick film that brings excellent high frequency property at 1.44 pF, 8.38 nH for the reactance. This small resistor has 1kW - 1us sufficiently high pulse resistant trait at wide range of operating temperature, -55°C ~ +175°C. The following functional design also aids the high performance.

- Multiple thermal layers including the metal header were removed to maximize the thermal performance.
- No need to do wire bonding, and normal reflow SAC solder is usable, which is the best for automated implementation.
- Surge performance was strengthened by maximizing the resistive surface.
- Robust enough for bending stress by using 0.8mm substrate.

Application

Motor drive devices, UPS, Automotive Electronic Devices, Power Generation and Storage Devices, Equipment Power Supply Devices, Medical Electronic Devices, Pre-charge Resistors for DC/DC Converters, Bleeder Resistors, Filter Damping Resistors, Snubber Resistors, Gate Resistors, Terminating Resistors for High-Frequency Electrical Equipment, Absorption Resistors, etc.

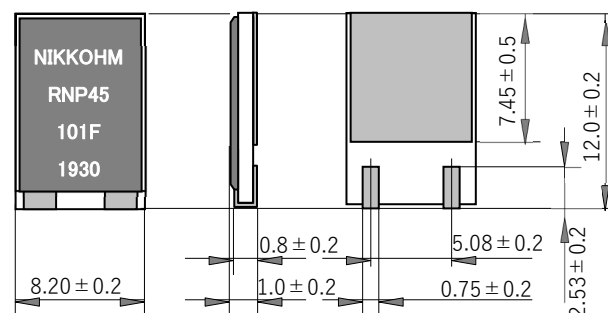
Rated and Specification

Rated Power	45 W ^{*1}
Resistance Range	0.02 Ω – 51kΩ
Thermal Resistance	1.0 °C/W ^{*2}
Capacitance	1.44 pF
Inductance	8.38 nH
Operation Temp.	-55 °C to +175 °C
Weight	0.3 gram

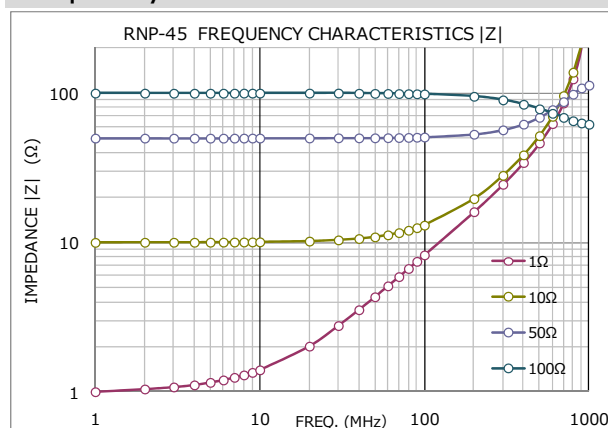
*1: When Backside metal at -55 °C~+ 25 °C

*2: Between Resistive and backside metal.

Dimensions (mm)



Frequency Characteristics



For further inquiries, samples, or quotations, feel free to contact to us.
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