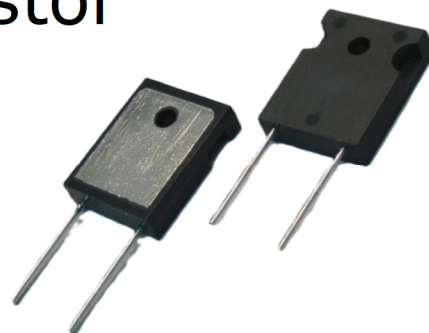


TO247 High Power Resistor

RNP-100S

Perfect for pulse circuits!
Low-reactance power film resistor



140W High Power Rated
Excellent **Frequency Characteristics**
Flexible lead terminals expand mounting design options.

Performance

The RNP-100S is a resistor that features a resistive film formed on the surface of a high thermal conductivity alumina substrate. Heat generated by the resistor is efficiently transferred to an external heatsink via a copper flange bonded to the backside, enabling effective thermal dissipation. The resistor element rated at 140 W is housed in an industry-standard TO-247 package. It offers a wide resistance range from 0.02 Ω to 51 k Ω , making it suitable for various applications such as current sensing, pre-charge circuits, microwave termination, high-frequency absorption, filter damping, and capacitor discharge. The thermal resistance from the resistive element to the backside copper flange is 0.9 $^{\circ}\text{C}/\text{W}$. The parasitic capacitance is 3.7 pF, and the series inductance is 12 nH. The insulation withstand voltage is rated at 2500 VAC.

Applications

Uninterruptible power supplies (UPS), Motor Drive Equipment, Automotive Electrical Equipment, power generation and storage equipment, power supply units, DC/DC converters, pre-charge, bleeder, filter, damping, snubber, current shunt, termination, and absorption.

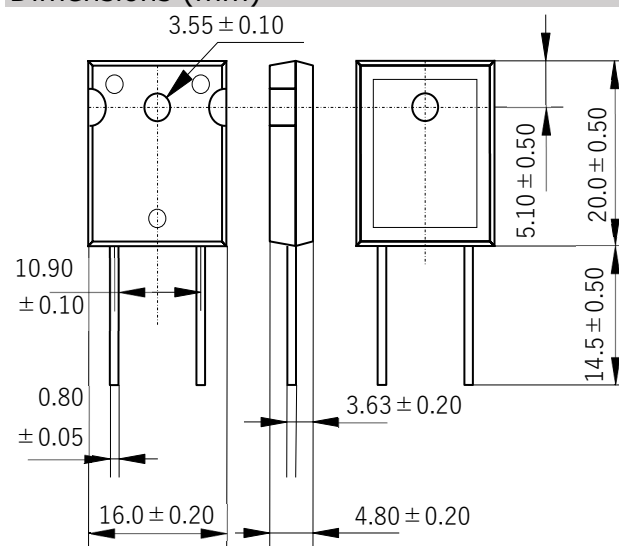
Rated and Specification

Rated Power	140W ^{*1}
Resistance Range	0.02 Ω ~51K Ω
Tolerance	1% ^{*2}
TCR	50/100/250 ppm/ $^{\circ}\text{C}$
Thermal Resistance	0.9 $^{\circ}\text{C}/\text{W}$
Capacitance	3.68 pF
Inductance	12.52 nH
Operation Temp.	-55 - +175 $^{\circ}\text{C}$

*1 : When the flange at -55 $^{\circ}\text{C}$ ~+25 $^{\circ}\text{C}$

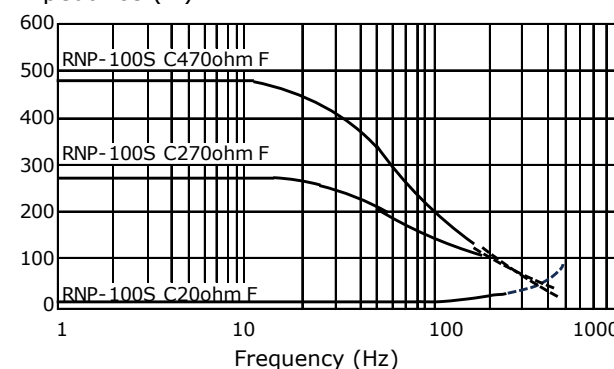
*2 : 0.02 Ω ~0.091 Ω -5%, 0.1 Ω ~51K Ω -1%

Dimensions (mm)



Frequency Characteristics

Impedance (Ω)



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