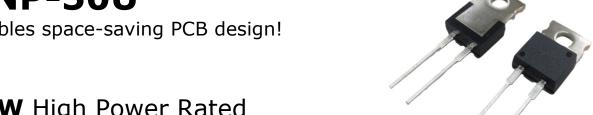


# TO220 High Power Resistor

# RNP-50U

Enables space-saving PCB design!



## **50W** High Power Rated

Wide Range Resistance( $0.02\Omega \sim 51K\Omega$ )

### AEC-Q200 Qualified & Reliable Track Record

#### Performance

This 50W TO220 packaged resistor accepts even high watts applied power alone (With flange temperature at 25°C). High power performance while being compact, with the same size as a 35W component. Great performance on the high frequency circuits and high-speed pulse circuits thanks to the high maximum operation temperature at +175°C and the non-inductive resistance. The lowest thermal resistance in the TO220 market, which is 2.3 °C/W. The flange junction structure by the thin film production technology strengthens the performance reliability. AEC-Q200 qualified. Molded with the ULV94V-0 fire-resistant sheathing resin.

#### Effective Use

Single RNP-50U is equivalent to multiple resistors on the circuit board and that minimize the mounting site.

\*We also offer the RNP-50E series in a surface-mount version.

#### **Applications**

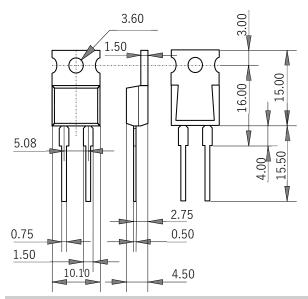
Power Supply Devices, Motor Drive Equipment, Inverters, High-frequency Power Supply Devices, Electronic Load Devices, Automotive Electrical Equipment, Industrial Instruments, Harmonic Filter Resistors, Bleeder Resistors, Snubber Resistors, Damping Resistors, Gate Drive Resistors etc...

#### Rated and Specification

Rated Power	50 W*1
Resistance Range	$0.02\Omega{\sim}51$ K $\Omega$
Tolerance	±1% *2
TCR	50~100 ppm/℃
Thermal Resistance	2.3 °C/W*3
Capacitance	1.69pF
Inductance	9.65nH
Operation Temp.	-55 °C to +175 °C

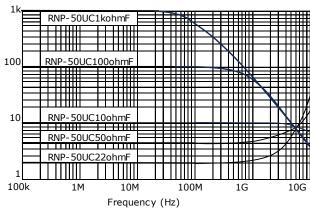
<sup>\*1:</sup> When the flange at  $-55^{\circ}$ C $\sim$ +25 $^{\circ}$ C

#### \*3 : Between the flange and the resistance. Dimensions (mm)



#### Frequency Characteristics

#### Impedance $(\Omega)$



For further inquiries, samples, or quotations, feel free to contact to us. sales@nikkohm.co.jp NIKKOHM Co., Ltd.

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<sup>\*2:</sup>  $0.02\Omega \sim 0.091\Omega - 5\%$ ,  $0.1\Omega \sim 51K\Omega - 1\%$