

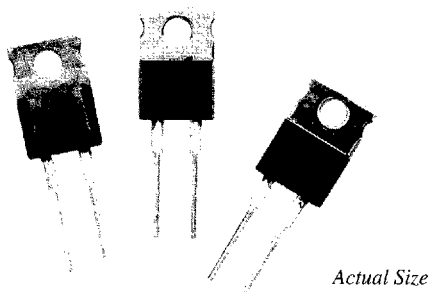
TO 220, 20 Watt High Power Resistor

RNP-20S Series



FEATURES

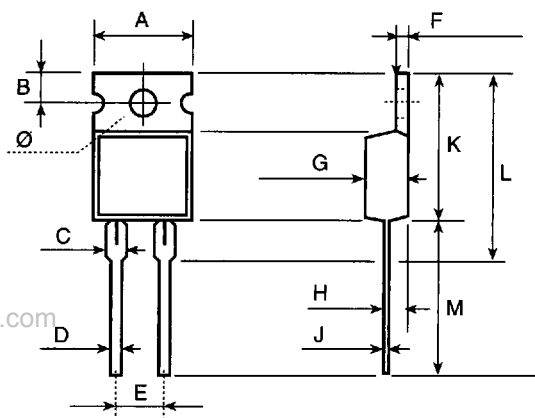
- Non-inductive design for high speed circuit requirements
- Low profile in a small package for high density requirements with flat leads
- Can withstand high vibration environments with heat sink mounting
- Superior to axial leaded high power resistors, RNP-20S has excellent heat transfer characteristics



Applications: RF termination resistors, high precision CRT display circuits, and pulse generators, RF termination resistors, as the replacement to be used in non-inductive power wirewound resistors.

Test	Specifications		Conditions
TCR:	A: ± 100 ppm/ $^{\circ}\text{C}$	C: ± 50 ppm/ $^{\circ}\text{C}$	-55°C to $+125^{\circ}\text{C}$
Absolute	J: $\pm 5.0\%$	F: $\pm 1.0\%$	
Power Rating: Resistor	20.0 Watt		With a heatsink (below 25°C at tab temp)
	1.0 Watt		Free air
Working Voltage	500V max.		Volt is in accordance with $E + \sqrt{R \times \sqrt{P}}$
Operating Temperature Range	-55 to $+155^{\circ}\text{C}$		

Dimensions



Dimension	Inches	Millimeters
A	0.417	10.6
B	0.106	2.7
C	0.059	1.5
D	0.030	0.75
E	0.200	5.08
F	0.059	1.5
G	0.177 ± 0.020	4.5 ± 0.5
H	0.098	2.5
J	0.020	0.5
K	0.591	15.0
L	0.748	19.0
M	0.591	15.0
Ø	0.142°	3.6°

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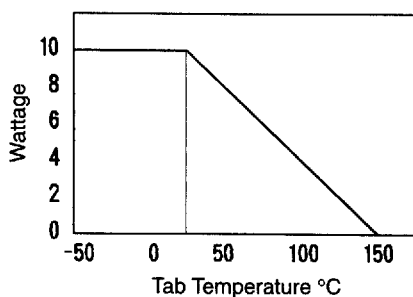
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Environmental Specifications

Max. Applied Power	40.0 Watt		Short time overload
Resistance Range	1 to 9.1 Ω	10 to 51 Ω	
Resistance Value Series	E-12	E-24	Containing 2.0 and 5.0
Load Life	$\pm(1.00\% + 0.05 \Omega)$		25°C, 90 min. ON, 30 min. OFF, 1,000 hrs.
Humidity	$\pm(1.00\% + 0.05 \Omega)$		30°C, 95% GH, DC 0.1W, 1,000 hrs.
Temperature Cycle	$\pm(0.25\% + 0.05 \Omega)$		-55°C, 30 min., +155°C, 30 min., 20 cycles
Short Time Overload	$\pm(0.25\% + 0.05 \Omega)$		Rated Wattage x 2.5, 5 sec, after 30 min., With heatsink (1.8°C/W)
Soldering Heat	$\pm(0.10\% + 0.05 \Omega)$		350 \pm 5°C, 3 sec., after 3 hours
Solderability	Over 3.4 of round		230 \pm 5°C, 3 sec.
Insulation resistance	Over 1,000M Ω		Between two terminals and tab
Vibration	$\pm(0.25\% + 0.05 \Omega)$		JIS-C-5202 6.3A

POWER DERATING CURVE



How to Order

Model Number	TCR	Resistance Value	Tolerance
RNP-20S	C	821	F

C: ± 50 ppm/°C
A: ± 100 ppm/°C

820 Ω *1
* First 2 digits are significant, the third is a decade multiplier

F: $\pm 1.0\%$
J: $\pm 5.0\%$