AP851 50 Watts TO-220 High Power Resistors

A high power TO-220 style resistor package designed for high frequency emitter circuits in switching power supplies. Also used in voltage regulation and low energy pulse loading.

- 50 Watts at 25˚C case temperature on heat sink
- Single screw mounting to heat sink
- Moulded case for proctection and easy to mount
- Non-inductive design
- Electrically isolated case
- RoHS Compliant

Characteristics

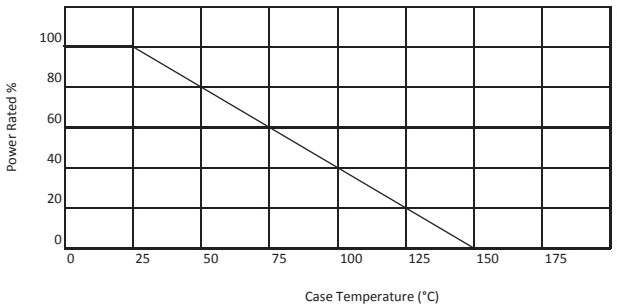
Power rating:	2.25 Watts in free air
Operating voltage:	420V max
Dielectric strength:	1800Vac
Insulation resistance:	10GΩ min
Temperature coefficient:	As specified, referenced to 25˚C, ΔR taken at +105˚C
Short time overload:	ΔR ±0.3%, 2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds
Load life:	ΔR ±1.0%, 2000 hours at rated power
Damp heat with load:	ΔR ±0.5%, 40 ±2˚C, 90 - 95% R.H max working voltage for 1000 hours with 1.5 hours “ON” and 0.5 hours “OFF”
Solderability:	90% min coverage, 245 ±5˚C for 3 seconds
Thermal shock:	ΔR ±0.3%, -65˚C - 150˚C, 100 cycles
Terminal strength:	ΔR ±0.2%, 2.4 N
Vibration and high frequency:	ΔR ±0.2%, 20g peak

Electrical Specifications

Resistance Value Range	Available Tolerance & Pref. Value Ranges	Available TCR
R1 - 1R	J (±5%) K (±10%)	Not specified
1R02 - 3R	F (±1%) , J (±5%) , K (±10%)	±300ppm/˚C
3R01 - 10R		±100ppm/˚C (std.) ±200ppm/˚C
10R2 - 10K	D (±0.5%) F (±1%) J (±5%) K (±10%)	±50ppm/˚C ±100ppm/˚C (std.) ±200ppm/˚C

Preferred value ranges:
F (±1%) - E96 , J (±5%) - E24, K (±10%) - E12

Derating Curve



For more information and ordering, please consult
www.arcolresistors.com

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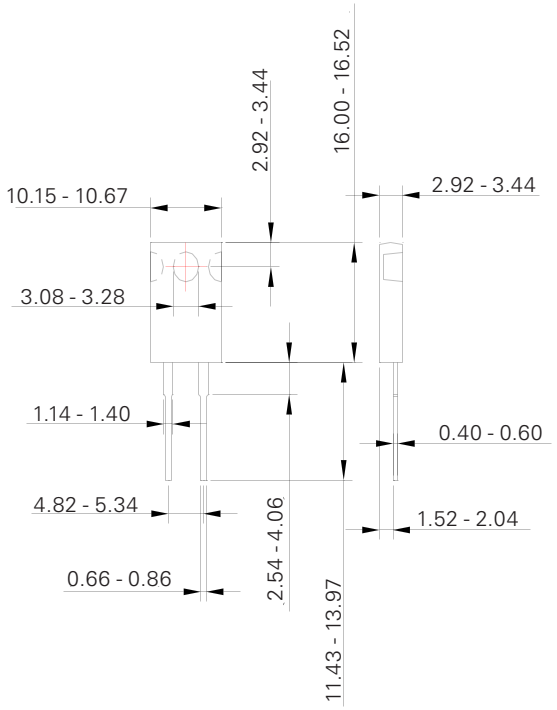
Dimensions (mm)



Standard part numbers

AP8511RF	AP8514R7J	AP85125RJ	AP851330RJ
AP8511RJ	AP85110RF	AP85147RJ	AP851470RJ
AP8512RJ	AP85110RJ	AP851100RF	AP8511KJ
AP8513R3J	AP85115RJ	AP851100RJ	AP85110KJ
AP8513R9J	AP85125RF	AP851220RJ	

Ordering Information

A P 8 5 1 1 0 0 R F N

Series	Resistance	Tolerance	TCR
		F = 1%	N = 50ppm
		J = 5%	L = 200ppm
		K = 10%	Blank = standard

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