

# AP836 35 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.

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



## Characteristics

Power rating:	2.50 Watts in free air
Operating voltage:	350V max
Dielectric strength:	1800Vac
Insulation resistance:	10GΩ min
Working temperature:	-65°C to 150°C
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
R05 - 1R	J (±5%) K (±10%)	Not specified
1R02 - 3R	F (±1%) , J (±5%) , K (±10%)	±300ppm/°C
3R01 - 10R		±100ppm/°C ±200ppm/°C
10R2 - 10K	D (±0.5%) F (±1%) J (±5%) K (±10%)	±50ppm/°C ±100ppm/°C ±200ppm/°C

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

## Derating Curve



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The information contained herein does not form part of a contract and is subject to change without notice. ARCOL operate a policy of continual product development, therefore, specifications may change.

It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask ARCOL.

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## Dimensions (mm)



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# Mouser Electronics

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## Ohmite:

[AP836 5R6 J 100PPM](#) [AP836 5K6 J 100PPM](#) [AP836 5R J 100PPM](#) [AP836 1K5 J 100PPM](#) [AP836 4R7 J 100PPM](#)  
[AP836 180R F 50PPM](#) [AP836 82R F 50PPM](#) [AP836 50R F 50PPM](#) [AP836 3K9 J 100PPM](#) [AP836 1K2 J 100PPM](#)  
[AP836 150R J 100PPM](#) [AP836 5R6 F 100PPM](#) [AP836 470R F 50PPM](#) [AP836 2R5 J](#) [AP836 18R J 100PPM](#) [AP836](#)  
[R8 J](#) [AP836 1R5 F](#) [AP836 15R J 100PPM](#) [AP836 2R2 F](#) [AP836 680R F 50PPM](#) [AP836 1R F](#) [AP836 R5 J](#) [AP836](#)  
[3R3 J 100PPM](#) [AP836 4K7 F 50PPM](#) [AP836 R06 J](#) [AP836 6R8 J 100PPM](#) [AP836 4R7 F 100PPM](#) [AP836 12R F](#)  
[50PPM](#) [AP836 25R J 100PPM](#) [AP836 390R J 100PPM](#) [AP836 1R8 J](#) [AP836 560R F 50PPM](#) [AP836 470R J 100PPM](#)  
[AP836 180R J 100PPM](#) [AP836 2K7 J 100PPM](#) [AP836 820R F 50PPM](#) [AP836 18R F 50PPM](#) [AP836 50R J 100PPM](#)  
[AP836 6K8 J 100PPM](#) [AP836 1R8 F](#) [AP836 4K7 J 100PPM](#) [AP836 3K3 F 50PPM](#) [AP836 2R5 F](#) [AP836 R05 J](#)  
[AP836 22R J 100PPM](#) [AP836 390R F 50PPM](#) [AP836 1K J 100PPM](#) [AP836 27R F 50PPM](#) [AP836 270R J 100PPM](#)  
[AP836 6K8 F 50PPM](#) [AP836 3R3 F 100PPM](#) [AP836 2K2 F 50PPM](#) [AP836 3K9 F 50PPM](#) [AP836 2K7 F 50PPM](#)  
[AP836 10K F 50PPM](#) [AP836 R7 J](#) [AP836 R1 J](#) [AP836 3R9 J 100PPM](#) [AP836 2K2 J 100PPM](#) [AP836 39R J 100PPM](#)  
[AP836 47R F 50PPM](#) [AP836 10R J 100PPM](#) [AP836 2R7 J](#) [AP836 150R F 50PPM](#) [AP836 5K F 50PPM](#) [AP836 6R8](#)  
[F 100PPM](#) [AP836 R3 J](#) [AP836 8R2 F 100PPM](#) [AP836 10R F 100PPM](#) [AP836 1K5 F 50PPM](#) [AP836 R2 J](#) [AP836](#)  
[8R2 J 100PPM](#) [AP836 330R J 100PPM](#) [AP836 1K8 F 50PPM](#) [AP836 8K2 F 50PPM](#) [AP836 47R J 100PPM](#) [AP836](#)  
[100R F 50PPM](#) [AP836 5K6 F 50PPM](#) [AP836 680R J 100PPM](#) [AP836 R07 J](#) [AP836 100R J 100PPM](#) [AP836 8K2 J](#)  
[100PPM](#) [AP836 22R F 50PPM](#) [AP836 220R J 100PPM](#) [AP836 33R J 100PPM](#) [AP836 120R F 50PPM](#) [AP836 12R J](#)  
[100PPM](#) [AP836 1K F 50PPM](#) [AP836 68R F 50PPM](#) [AP836 27R J 100PPM](#) [AP836 R08 J](#) [AP836 2R7 F](#) [AP836 220R](#)  
[F 50PPM](#) [AP836 56R J 100PPM](#) [AP836 39R F 50PPM](#) [AP836 330R F 50PPM](#) [AP836 1K8 J 100PPM](#) [AP836 270R F](#)  
[50PPM](#) [AP836 3R9 F 100PPM](#) [AP836 120R J 100PPM](#)