

# 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 (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

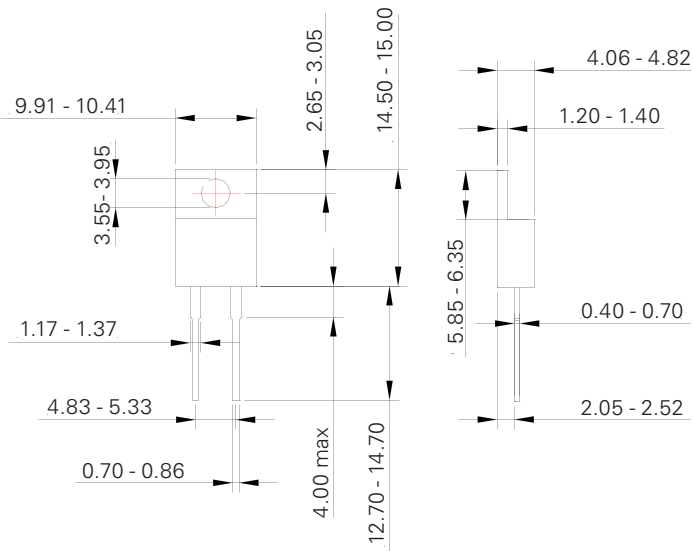
## Derating Curve



For more information and ordering, please consult  
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## Dimensions (mm)



## Standard part numbers

AP8361RJ	AP83615RJ	AP836150RJ
AP8362R2J	AP83622RJ	AP836330RJ
AP8363R3J	AP83633RJ	AP836470RJ
AP8364R7J	AP83647RJ	AP8361KJ
AP8365R6J	AP83651RJ	AP8362K4J
AP8367R5J	AP83675RJ	AP8364K7J
AP83610RJ	AP836100RJ	AP83610KJ

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# Mouser Electronics

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## Ohmite:

[AP836 1R F](#) [AP836 1R J](#) [AP836 2R2 J](#) [AP836 75R J](#) [AP836 4K7 J](#) [AP836 10R J](#) [AP836 47R J](#) [AP836 1K J](#)  
[AP836 3R3 J](#) [AP836 15R J](#) [AP836 51R J](#) [AP836 5R6 J](#) [AP836 100R J](#) [AP836 7R5 J](#) [AP836 470R J](#) [AP836 10K J](#)  
[AP836 2K4 J](#) [AP836 22R J](#) [AP836 33R J](#) [AP836 330R J](#) [AP836 4R7 J](#) [AP836 150R J](#) [AP836 100R F](#) [AP836 10R F](#)  
[AP836 150R F](#) [AP836 15R F](#) [AP836 1K F](#) [AP836 1K5 F](#) [AP836 20R F](#) [AP836 25R F](#) [AP836 27R F](#) [AP836 2R F](#)  
[AP836 33R F](#) [AP836 3K F](#) [AP836 3R3 F](#) [AP836 47R F](#) [AP836 4R F](#) [AP836 4R7 F](#) [AP836 50R F](#) [AP836 5R F](#)  
[AP836 75R F](#) [AP836 7R5 F](#)