

# 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

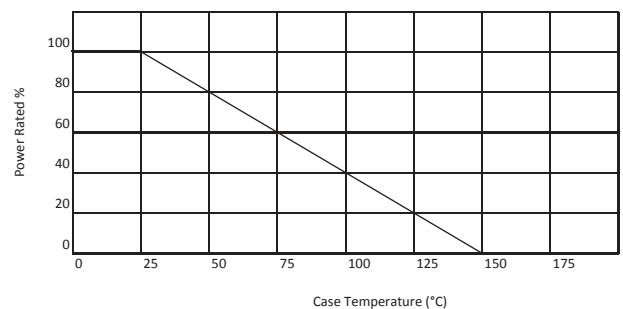
Power rating:	2.50 Watts in free air
Operating voltage:	350V max
Dielectric strength:	1800Vac
Insulation resistance:	10GΩ min
Working temperature:	-65°C to 150°C
Temperature coefficient:	As specified, referenced to 25°C, ΔR taken at +105°C
Short time overload:	ΔR ±0.3%, 2 times rated power with applied 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

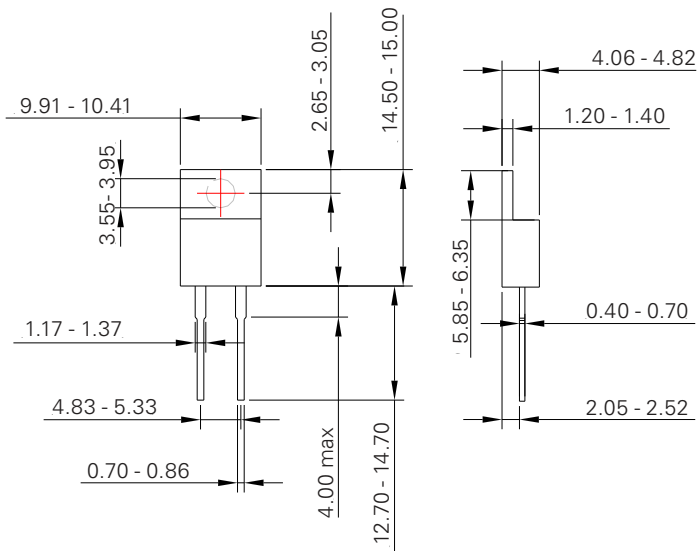
## Derating Curve



For more information and ordering, please consult  
[www.arcolresistors.com](http://www.arcolresistors.com)

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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

ARCOL UK Limited,  
 Threemilestone Ind. Estate,  
 Truro, Cornwall, TR4 9LG, UK.  
 T +44 (0) 1872 277431  
 F +44 (0) 1872 222002  
 E sales@arcolresistors.com

[www.arcolresistors.com](http://www.arcolresistors.com)

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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.