## 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 proctection 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:  $10G\Omega$  min

Working temperature:  $-65^{\circ}$ C to  $150^{\circ}$ C

Temperature coefficient: As specified, referenced to 25°C, ΔR taken at +105°C

Short time overload:  $\Delta R \pm 0.3\%$ , 2 times rated power with applied voltage not to exceed 1.5 times maximum continuous

operating voltage for 5 seconds

Load life:  $\Delta R \pm 1.0\%$ , 2000 hours at rated power

Damp heat with load:  $\Delta R \pm 0.5\%$ ,  $40 \pm 2^{\circ}C$ , 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  $\pm$ 5°C for 3 seconds Thermal shock:  $\Delta R \pm 0.3\%$ , -65°C - 150°C, 100 cycles

Terminal strength:  $\Delta R \pm 0.2\%$ , 2.4 N Vibration and high frequency:  $\Delta R \pm 0.2\%$ , 20g peak

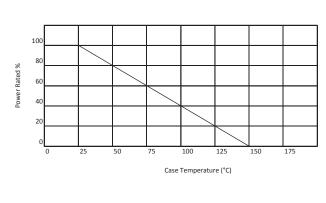
#### **Electrical Specifications**

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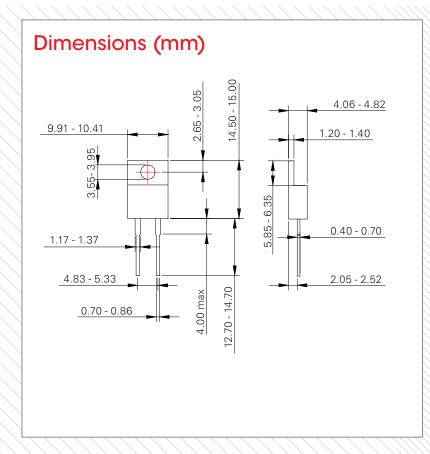
The information contained herein does not form part of a contract and is subject to change without notice. ARCOL operate a policy of continual product development, therefore, specifications may change.

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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### **Ordering Procedure**

<u>Standard Resistor:</u> Series, Resistance Value, Tolerance Code, TCR

eg: AP836 10K J  $\pm$  50ppm/°C

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