AP830 30 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.

- 30 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: 2.25 Watts in free air

Operating voltage: 450 V max Dielectric strength: 1800 Vac Insulation resistance: $10G\Omega$ min Working temperature range: -65°C to $+150^{\circ}\text{C}$

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

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

Damp heat with load: $\Delta R \pm 0.5\%$, 40°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

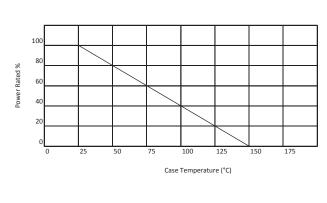
Electrical Specifications

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 - 100K	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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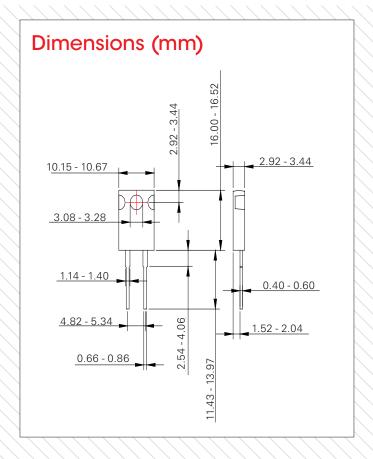
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It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask ARCOL.

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