

# AP830 30W TO-220 High Power Resistors



A high power T0220 style resistor package designed for high frequency emitter circuits in switching power supplies. Also used in voltage regulation and low energy pulse loading



- 30 Watt at 25°C case temperature heat sink mounted
- TO-220 style power package
- Single screw mounting to heat sink
- Moulded case for protection and easy to mount
- Electrically isolated case
- Non-inductive design
- RoHS Compliant

## Characteristics

Resistance Range	Resistance Tolerance	TCR (PPM/°C)
R05 - R1	J (±5%) K (±10%)	Not Specified
>R1 - 1R	J (±5%) K (±10%)	Not Specified
>1R - 3R	F (±1%) J (±5%) K (±10%)	±300
>3R - 10R	F (±1%) J (±5%) K (±10%)	±100 ±200
>10R- 10K	D (±0.5%) F (±1%) J (±5%) K (±10%)	±50 ±100 ±200

### NOTES

Operating Voltage:350V Max.  
Dielectric Strength:1800VAC  
Insulation Resistance: 10GΩ/min.  
Working Temperature Range: -65°C to +150°C  
Lead Material: Tinned Copper.  
Maximum Torque: 0.9 Nm..  
When in Free Air at 25°C, the TR30 is Rated for 2.25W.  
The Case Temperature is to be used for the Definition of the Applied Power Limit.  
The Case Temperature Measurement Must be Made with a Thermocouple Contacting the Center of the Component Mounted on the Designed Heat Sink.  
Thermal Grease Should be Applied Properly.

Test Item	Specification	Test Method
Temperature Coefficient of Resistance	As spec.	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 %	Rated power 2,000 hours
Humidity (Steady State)	ΔR± 0.5 %	40°C ,90 - 95%RH, RCWV 1.5hours ON,0.5hours OFF, total 1000 - 1048 hours
Thermal Shock	ΔR ± 0.3 %	-65°C - 150°C, 100 cycle
Terminal Strength	ΔR ± 0.2 %	Pull Test 2.4N,
Vibration, High Frequency	ΔR ± 0.2 %	
Solderability	90% Min. Coverage	245°C ±5°C, 3 (±0.5) seconds

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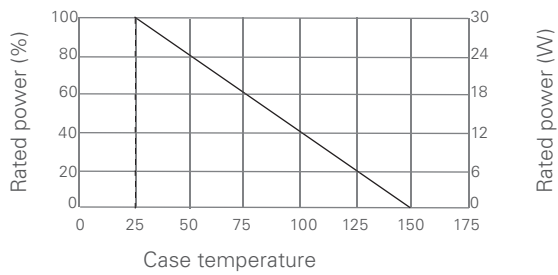
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It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask Arcol.

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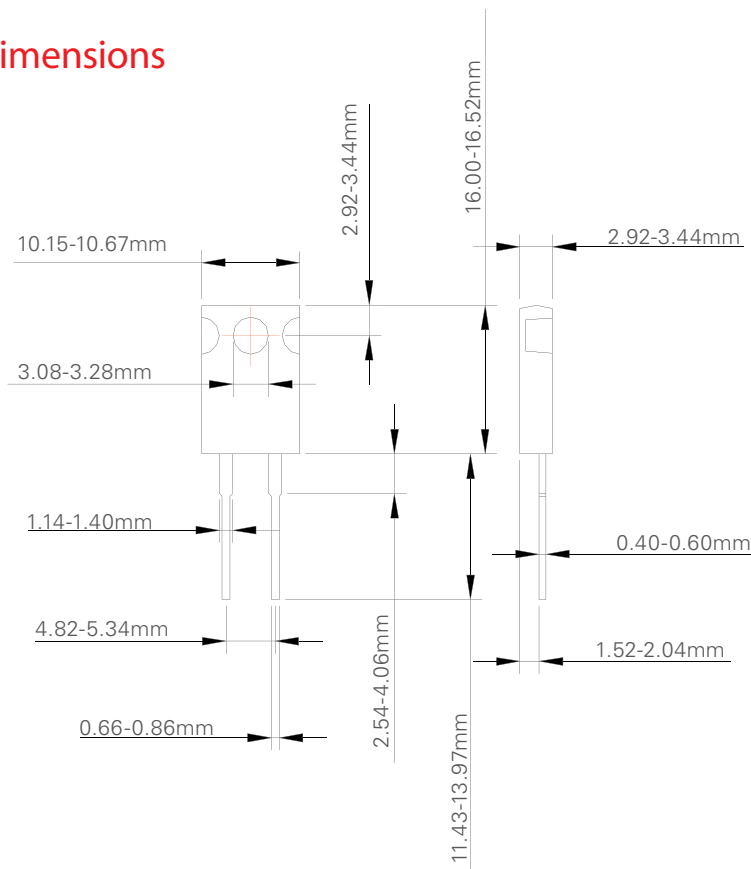
## Derating Curve



## Ordering Procedure

Standard Resistor: Series, Resistance, Tolerance Code and TCR code. e.g AP830 10R J L

## Dimensions



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