

AP821 20 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.

- 20 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:	420V max
Dielectric strength:	1800Vac
Insulation resistance:	10GΩ min
Working temperature range:	-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 ±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



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

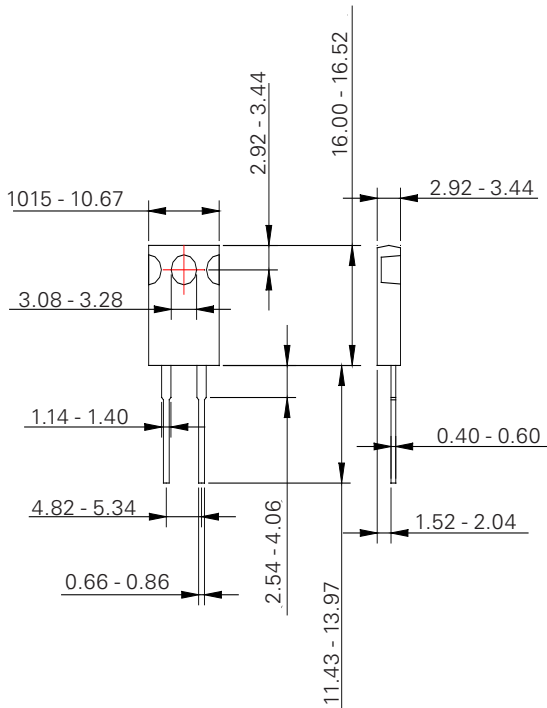
The information contained herein does not form part of a contract and is subject to change without notice. Arcol operate a policy of continual product development, therefore, specifications may change.

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.

AP821 20 Watts TO-220 High Power Resistors



Dimensions (mm)



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

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.