

AP101 100W TO-247 High Power Resistors **ARCOL**

- 100 watts at 25°C case temperature heat sink mounted
- TO-247 style power package
- Single screw mounting to heat sink
- Moulded case for protection
- Electrically isolated case
- Non-Inductive design
- RoHS Compliant



Characteristics

Tolerance (Code):	± 1% (F), ± 5% (J), ± 10% (K)
Operating temperature:	-65°C to +175°C
Temperature coefficient:	± 50ppm/°C to ± 300ppm/°C (re to ohmic values), referenced to 25°C, ΔR taken at +105°C
Operating voltage:	700V max
Dielectric strength:	1800Vac 60 seconds, ΔR±0.15%
Insulation resistance:	10G min
Maximum torque:	0.9 Nm
Free air:	25°C, rated at 3.5W
Load Life	ΔR±1.0%, Rated power, 2,000 hours
Solderability	90% min. coverage, 245±5°C for 3 seconds
Momentary Overload	ΔR±0.5%, 1.5 times rated power and V (dc) ≤ 1.5VMax. for 5 seconds
Moisture resistance	ΔR±0.5%, -10°C - +65°C, RH>90%, cycle 240 hours
Thermal Shock	ΔR±0.5%, -65°C - 150°C, 100 cycles
Terminal Strength	ΔR±0.2%, (Pull Test) 2.4N
Vibration, High Frequency	ΔR±0.4%, 20g peak

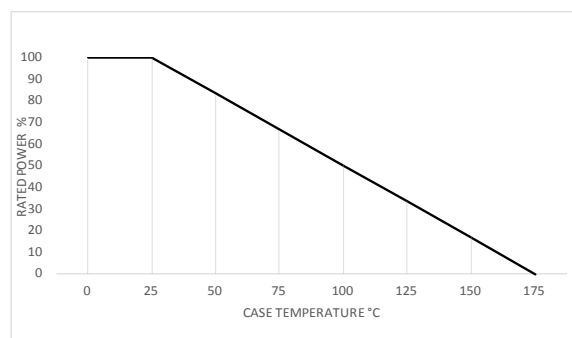
Ordering Procedure

Standard Resistor: Series, Resistance Value, Tolerance Code, TCR
eg: AP101 10K J 50ppm

Electrical Specifications

Value Range	Tolerance Pref. Value Range	TCR (ppm/°C)
R05 - 1R	± 1% (F)	Not specified
> 1R - 3R	E12, E24, E96	± 300ppm/°C
> 3R - 10R	± 5% (J)	± 100ppm/°C, ± 200ppm/°C
> 10R - 100K	E12, E24 ± 10% (K) E12	± 50ppm/°C, ± 100ppm/°C, ± 200ppm/°C

Derating Curve



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 centre of the component mounted on the designed heat sink
Thermal grease should be applied properly

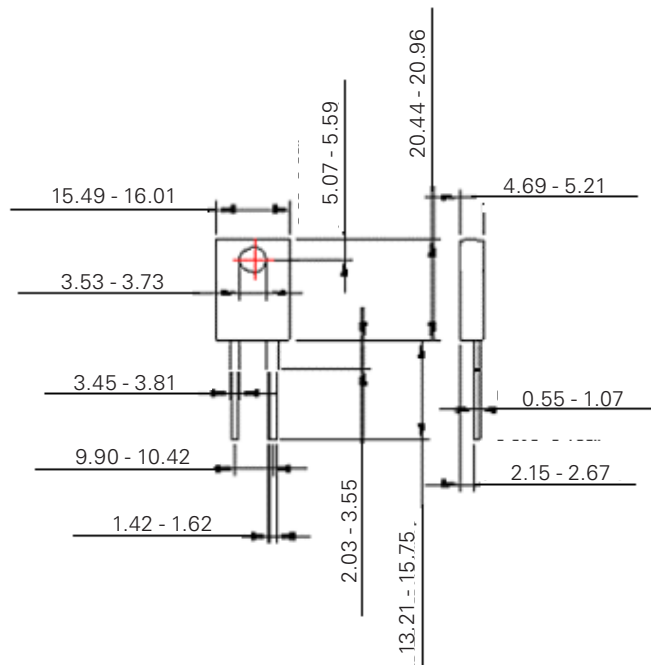
ARCOL UK Limited,
Threemilestone Ind. Estate,
Truro, Cornwall, TR4 9LG, UK.
T +44 (0) 1872 277431
F +44 (0) 1872 222002
E sales@arcolresistors.com

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.

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Ohmite:

[AP101 1R5 J](#) [AP101 R2 J](#) [AP101 1R J](#) [AP101 R1 J](#) [AP101 R5 J](#) [AP101 2R2 J](#) [AP101 2R7 J](#) [AP101 1R2 J](#)
[AP101 1R8 J](#) [AP101 1R F](#) [AP101 R05 J](#) [AP101 24R J](#) [AP101 3R3 J](#) [AP101 100R J](#) [AP101 390R J](#) [AP101 2K7 J](#)
[AP101 10K J](#) [AP101 56R J](#) [AP101 10R J](#) [AP101 270R J](#) [AP101 51R J](#) [AP101 560R J](#) [AP101 62R J](#) [AP101 3R9 J](#)
[AP101 470R J](#) [AP101 4R3 J](#) [AP101 82R J](#) [AP101 3K3 J](#) [AP101 180R J](#) [AP101 120R J](#) [AP101 150R J](#) [AP101 3K9 J](#)
[AP101 680R J](#) [AP101 5R6 J](#) [AP101 6R2 J](#) [AP101 27R J](#) [AP101 3R J](#) [AP101 4R7 J](#) [AP101 330R J](#) [AP101 2K J](#)
[AP101 200R J](#) [AP101 820R J](#) [AP101 4K3 J](#) [AP101 8K2 J](#) [AP101 18R J](#) [AP101 47R J](#) [AP101 33R J](#) [AP101 3K J](#)
[AP101 22R J](#) [AP101 68R J](#) [AP101 7R5 J](#) [AP101 5K6 J](#) [AP101 6R8 J](#) [AP101 1K2 J](#) [AP101 39R J](#) [AP101 1K J](#)
[AP101 1K8 J](#) [AP101 620R J](#) [AP101 15R J](#) [AP101 4K7 J](#) [AP101 30R J](#) [AP101 220R J](#) [AP101 7K5 J](#) [AP101 8R2 J](#)
[AP101 12R J](#) [AP101 2K2 J](#) [AP101 6K8 J](#) [AP101 1K5 J](#) [AP101 3K6 J](#) [AP101 25R F](#) [AP101 5R F](#) [AP101 100R F](#)
[AP101 12R F](#) [AP101 1K F](#) [AP101 20R F](#) [AP101 56R F](#) [AP101 5K F](#) [AP101 2R F](#) [AP101 33R F](#) [AP101 3R F](#)
[AP101 4R F](#) [AP101 500R F](#) [AP101 50R F](#)