AP101 100W TO-247 High Power Resistors FRCOL

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

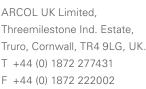
Ordering Procedure

Standard Resistor: Series, Resistance Value, Tolerance Code, TCR

eg: AP101 10K J 50ppm

Electrical Specifications

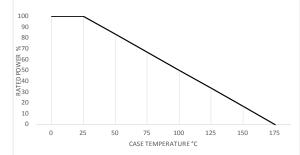
Value Range	Tolerance Pref. Value Range	TCR (ppm/°C)
R05 - 1R	± 1% (F)	Not specified
> 1R - 3R	E12, E24, E96	± 300ppm/°C
> 3R - 10R	± 5% (J)	± 100ppm/°C, ± 200ppm/°C
> 10R - 100K	E12, E24 ± 10% (K) E12	± 50ppm/°C, ± 100ppm/°C, ± 200ppm/°C



E sales@arcolresistors.com

www.arcolresistors.com

Derating Curve



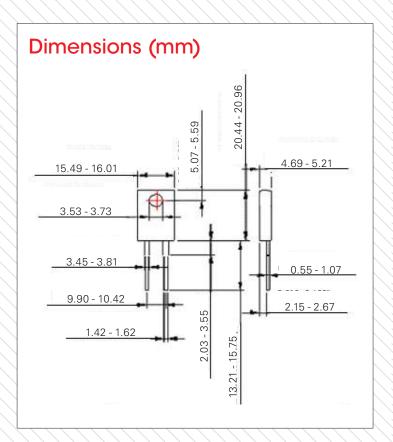
The case temperature is to be used for the definition of the applied power limit The case temperature measurement must be made with a thermocouple contacting the centre of the component mounted on the designed heat sink Thermal grease should be applied properly

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.



AP101 100W TO-247 High Power Resistors ARCOL



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.