AP101 100W TO-247 High Power Resistors

- 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

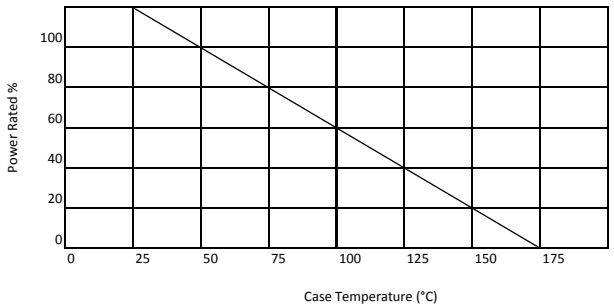
Standard Resistor: Series, Resistance Value, Tolerance Code, TCR

eg: AP101 10K J 50ppm

Electrical Specifications

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

Derating Curve

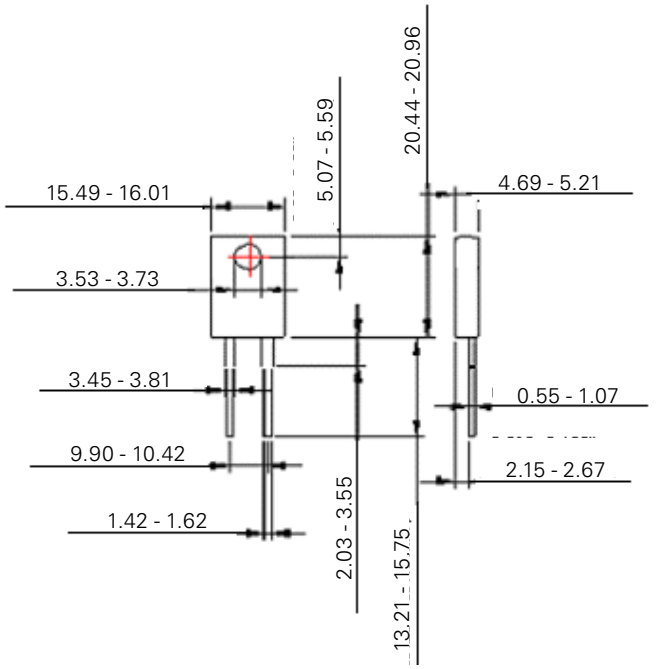


The case temperature is to be used for the definition of the applied power limit
The case temperature measurement must be made with a thermocouple contacting the centre of the component mounted on the designed heat sink
Thermal grease should be applied properly

For more information and ordering, please consult
www.arcolresistors.com

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Dimensions (mm)



Standard part numbers

AP101R05J	AP1017R5J	AP101100RJ	AP1012KJ
AP101R1J	AP1018R2J	AP101120RJ	AP1012K2J
AP101R2J	AP10110RJ	AP101150RJ	AP1012K7J
AP101R5J	AP10112RJ	AP101180RJ	AP1013KJ
AP1011RJ	AP10115RJ	AP101200RJ	AP1013K3J
AP1011R2J	AP10118RJ	AP101220RJ	AP8213K6J
AP1011R5J	AP10122RJ	AP101270RJ	AP1013K9J
AP1011R8J	AP10124RJ	AP101330RJ	AP1014K3J
AP1012R2J	AP10127RJ	AP101390RJ	AP1014K7J
AP1012R7J	AP10130RJ	AP101470RJ	AP1015K6J
AP1013RJ	AP10133RJ	AP101560RJ	AP1016K8J
AP1013R3J	AP10139RJ	AP101620RJ	AP1018K2J
AP1013R9J	AP10147RJ	AP101680RJ	AP1017K5J
AP1014R3J	AP10151RJ	AP101820RJ	AP10110KJ
AP1014R7J	AP10156RJ	AP1011KJ	
AP1015R6J	AP10162RJ	AP1011K2J	
AP1016R2J	AP10168RJ	AP1011K5J	
AP1016R8J	AP10182RJ	AP1011K8J	

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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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