AP725 20W TO-263 Power Resistor

- Power Dissipation 20 watts with h/s
- Low inductance
- D²PAK housing
- Electrically isolated from backplate
- TCR Options ±100 ppm/°C
- RoHS Compliant



Characteristics

Tolerance (Code): \pm 1% (F), \pm 5% (J)

Value range: R02 to 130K (with standard resistance values)

Power rating: 20W at 25°C case temperature

Temperature coefficient: ± 100 ppm/°C

Thermal resistance: 6.5°C/W

Inductance: $0.1\mu H$ maximum

Operating voltage: √P*R with a maximum of 250V

 $\begin{array}{ll} \mbox{Dielectric strength:} & 2\mbox{kVac} \\ \mbox{Insulation resistance:} & 10\mbox{G}\Omega \end{array}$

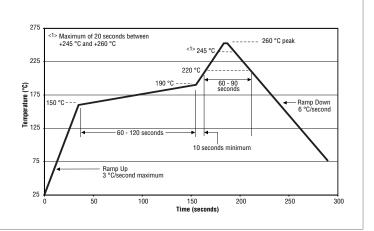
Operating temperature: -55°C to 155°C

Electrical Specifications

Parameter	Specification
Short term overload (2x Pr for R < 2Ω , 1.6 x Pr for R $\geq 2\Omega$, V < 1.5x operating voltage)	ΔR ±0.25%
Load life (1000 hours at rated power)	ΔR ±1.0%
Thermal shock (-55°C to 155°C, 5 cycles)	ΔR ±0.5%
Resistance to soldering heat (10 sec at 270°C)	ΔR ±0.5%
Vibration (20 G 10 - 2000Hz .06" D.A)	ΔR ±0.25%
Moisture sensitivity level	1

Soldering Profile

Power dissipation is 2.8W at an ambient temperature of 25°C when mounted on a double sided copper using FR4, $70\mu m$ of copper 39x30x1.6mm



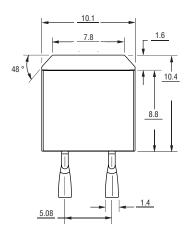
For more information and ordering, please consult

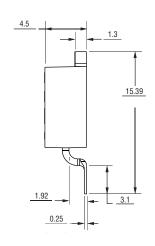
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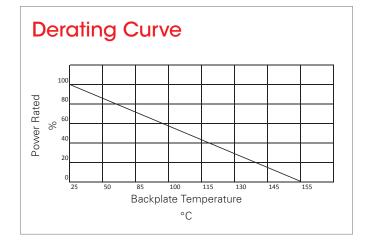
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Dimensions (mm ± 0.38)





Recommended pad layout



Standard part numbers

AP7255RF AP725R1F AP72525RF AP72575RF AP725R5F AP72510RF AP72530RF AP725100RF AP7251RF AP72512RF AP72533RF AP725150RF AP7251R5F AP72515RF AP72547RF AP725200RF AP7252RF AP72520RF AP72568RF AP7251KF

Ordering Procedure

<u>Standard Resistor:</u> Series, Resistance Value, Tolerance, Packaging options T&R - TR or Tubes - blank

e.g. AP725 8R2 J TR / AP725 2R F

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

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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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