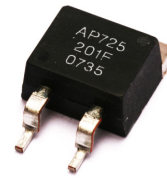


# AP725 20W TO-263 Power Resistor

- Power Dissipation 20 watts with h/s
- Low inductance
- D<sup>2</sup>PAK housing
- Electrically isolated from backplate
- TCR Options  $\pm 100$  ppm/ $^{\circ}$ C
- RoHS Compliant



## Characteristics

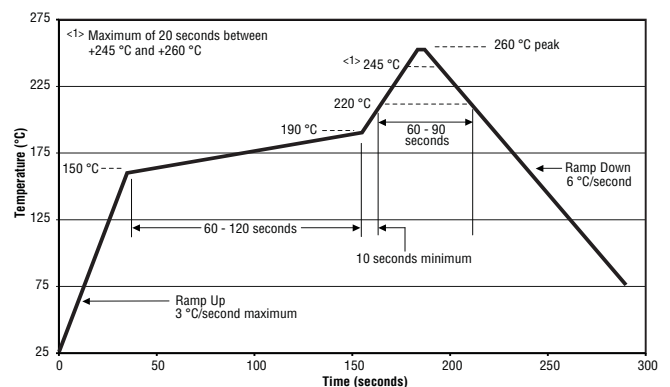
|                          |   |
|--------------------------|---|
| Tolerance (Code):        | $\pm 1\%$ (F), $\pm 5\%$ (J)                  |
| Value range:             | R02 to 130K (with standard resistance values) |
| Power rating:            | 20W at 25 $^{\circ}$ C case temperature       |
| Temperature coefficient: | $\pm 100$ ppm/ $^{\circ}$ C                   |
| Thermal resistance:      | 6.5 $^{\circ}$ C/W                            |
| Inductance:              | 0.1 $\mu$ H maximum                           |
| Operating voltage:       | $\sqrt{P \cdot R}$ with a maximum of 250V     |
| Dielectric strength:     | 2kVac   |
| Insulation resistance:   | 10G $\Omega$                                  |
| Operating temperature:   | -55 $^{\circ}$ C to 155 $^{\circ}$ C          |

## Electrical Specifications

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

## Soldering Profile

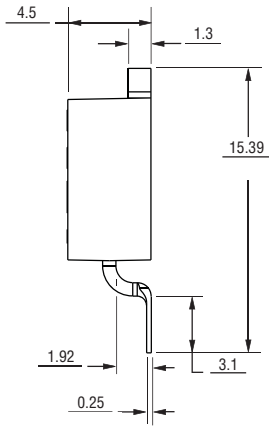
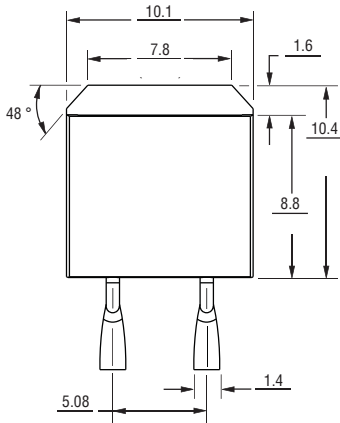
Power dissipation is 2.8W at an ambient temperature of 25 $^{\circ}$ C when mounted on a double sided copper using FR4, 70 $\mu$ m of copper 39x30x1.6mm



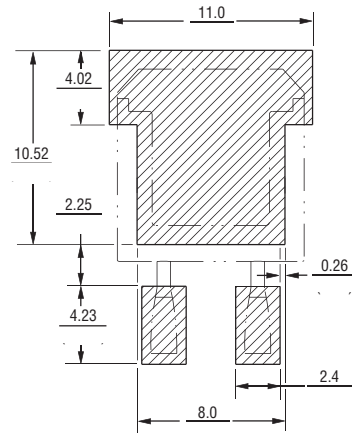
For more information and ordering, please consult  
[www.arcolresistors.com](http://www.arcolresistors.com)

# AP725 20W TO-263 Power Resistor

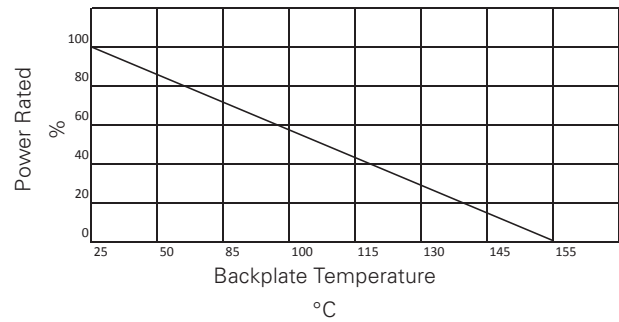
## Dimensions (mm ± 0.38)



## Recommended pad layout



## Derating Curve



## Standard part numbers

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

## Ordering Procedure

Standard Resistor: 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](http://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.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Thick Film Resistors - SMD category](#):*

*Click to view products by [Ohmite manufacturer](#):*

Other Similar products are found below :

[CR-05FL7--19K6](#) [CR-05FL7--243R](#) [CR-05FL7--40K2](#) [CR-12JP4--680R](#) [CRCW04021K20FKEE](#) [CRCW06036K80FKEE](#)

[M55342K06B2E94RS2](#) [M55342K06B309DRS3](#) [M55342K06B6E81RS3](#) [M55342K08B100DRWB](#) [M55342M05B200DRWB](#)

[M55342M06B26E7RS3](#) [MC0603-511-JTW](#) [742C083750JTR](#) [MCR01MZPF1202](#) [MCR01MZPF1601](#) [MCR01MZPF1800](#) [MCR01MZPF6201](#)

[MCR01MZPF9102](#) [MCR01MZPJ113](#) [MCR01MZPJ121](#) [MCR01MZPJ125](#) [MCR01MZPJ203](#) [MCR01MZPJ751](#) [MCR01MZPJ822](#)

[MCR03EZPJ103](#) [MCR03EZPF1272](#) [MCR03EZPJ123](#) [MCR03EZPJ270](#) [MCR03EZPJ821](#) [MCR10EZPF1102](#) [MCR10EZPF2003](#)

[MCR10EZPF2700](#) [MCR18EZPJ330](#) [RC0603F1473CS](#) [RC0603F150CS](#) [RC1005F1152CS](#) [RC1005F1182CS](#) [RC1005F1372CS](#)

[RC1005F183CS](#) [RC1005F1911CS](#) [RC1005F1912CS](#) [RC1005F203CS](#) [RC1005F2052CS](#) [RC1005F241CS](#) [RC1005F2431CS](#)

[RC1005F3011CS](#) [RC1005F303CS](#) [RC1005F4321CS](#) [RC1005F4642CS](#)