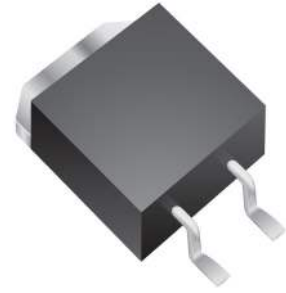


# AP735 35W TO-263 Power Resistor **ARCOL**

- Power Dissipation 35 watts with heat sink
- Low inductance
- D<sup>2</sup>PAK housing
- Electrically isolated from backplate
- TCR Options  $\pm 100$  ppm/ $^{\circ}\text{C}$
- RoHS Compliant



## Characteristics

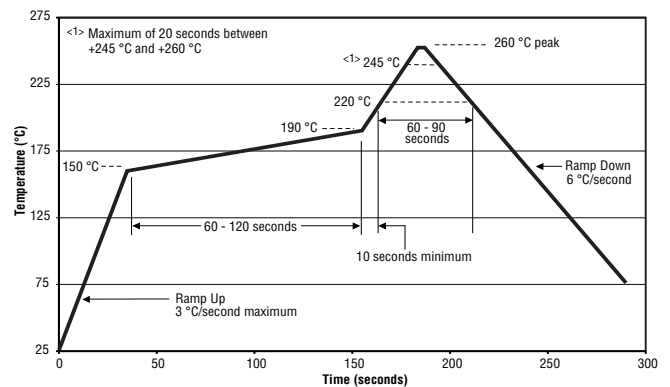
Tolerance (Code):	$\pm 1\%$ (F), $\pm 5\%$ (J)
Value range:	R02 to 130K (with standard resistance values)
Power rating:	35W at 25 $^{\circ}\text{C}$ case temperature
Temperature coefficient:	$\pm 100$ ppm/ $^{\circ}\text{C}$
Thermal resistance:	3.7 $^{\circ}\text{C}/\text{W}$
Inductance:	0.1 $\mu\text{H}$ maximum
Operating voltage:	$\sqrt{P \cdot R}$ with a maximum of 250V
Dielectric strength:	2kVac
Insulation resistance:	10G $\Omega$
Operating temperature:	-55 $^{\circ}\text{C}$ to 155 $^{\circ}\text{C}$

## 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 $^{\circ}\text{C}$ to 155 $^{\circ}\text{C}$ , 5 cycles)	$\Delta R \pm 0.5\%$
Resistance to soldering heat (10 sec at 270 $^{\circ}\text{C}$ )	$\Delta R \pm 0.5\%$
Vibration (20 G 10 - 2000Hz .06" D.A)	$\Delta R \pm 0.25\%$
Moisture sensitivity level	1

## Soldering Profile

Power dissipation is 3.5W at an ambient temperature of 25 $^{\circ}\text{C}$  when mounted on a double sided copper using FR4, 70 $\mu\text{m}$  of copper 39x30x1.6mm



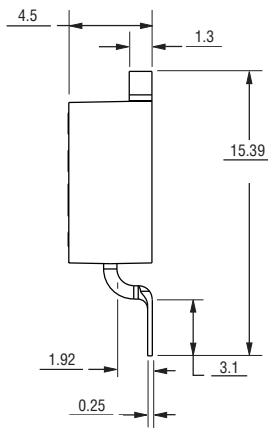
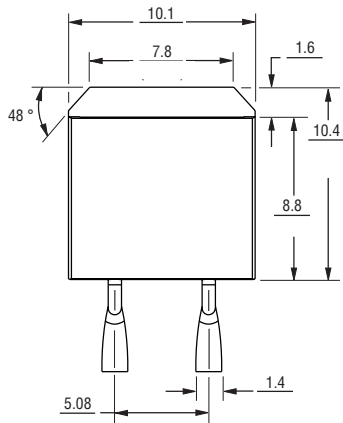
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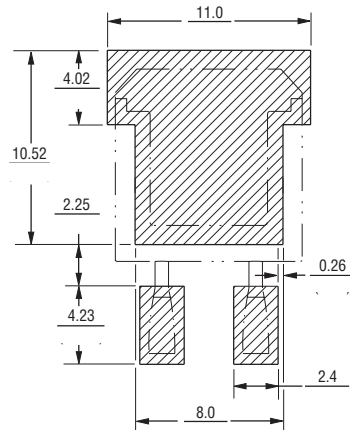
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It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask ARCOL.

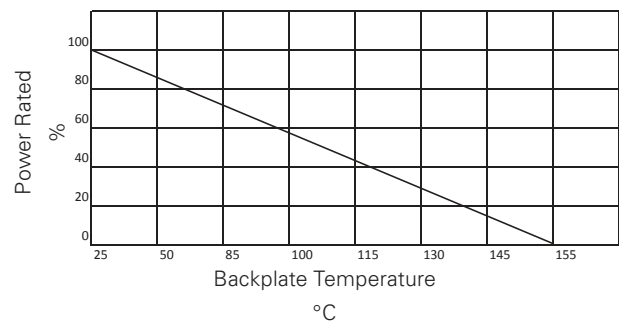
## Dimensions (mm)



## Recommended pad layout



## Derating Curve



## Ordering Procedure

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

e.g. AP735 8R2 J TR / AP735 2R F

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