Wide Terminal Chip Resistors AEC-Q200 qualified



WK73/WU73 Series

Wide Terminal Chip Resistors



High reliability and enhanced terminal strength are essential in all power applications.

KOA's wide terminal resistors offer several advantages compared to standard footprints.

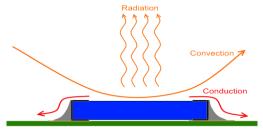
The 0612 chip size allows 6 x power rating compared to standard 1206 parts. This saves board space and is possible due to the improved heat dissipation via the solder joints. The large terminals also enhance terminal

strength and the smaller distance between the terminals reduces expansion stress. Finally, the inner resistive pattern is designed to minimize hotspots.

These benefits combined, result in a superior reliability compared to standard flat chip resistors.

KOA offers the WK73S & the WU73-series which are suitable for current sensing (10 m Ω to 9.1 Ω) and the WK73R-series for the standard resistance range (10 Ω to 1 M Ω) in 7 different sizes.





Rated Power of a resistor strongly depends on the maximum available heat transport capability, which mainly relies on heat conduction through the solder joint to the PCB. The temperature dissipation through air convection and radiation can be neglected. Knowing this, KOA offers the WK73 resistors with inverse geometry. The long sides of the flat chip resistors are used for better heat dissipation through the solder junctions.

Size 0612

- power rating 1.5 W
- short distance between the terminations
- small mechanical stress at solder fillet
- low thermal expansion influence from PCB

Product Features

- Excellent heat dissipation
- Superior temperature and power cycling performance
- Low thermal expansion stress
- Higher rated power less board space than standard chips
- Standard sizes 0204, 0306, 0508, 0612, 1020, 1218 and 1225
- Resistance range 10 m Ω ... 1 M Ω
- EU-RoHS compliant, AEC-Q200 qualified
- Anti-Sulfuration types also available (WK73S/R_RT) NEW

Size 1206

- power rating 0.25 W
- longer distance between the terminations
- absolute stress at solder fillet is higher
- higher thermal expansion influence from PCB

Application Examples

- Automotive, including 'under the hood' applications
- Power supplies
- Motor control units
- Industrial power control
- Battery packs
- Consumer electronics



For more information, please contact:

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