

Fast Facts



TFHP Series

Thin Film High Power AlN Chip

Features:

- Power rating 6W in 2512 size
- Power rating 2W in 1206 size
- Aluminium nitride substrate
- Large termination soldering area
- Precision to 0.1%, 25ppm/°C



Description:

TFHP series brings a combination of high power and high precision into a single resistor product.

The high ratings of up to 6W at 70°C are achieved mainly by the use of an aluminium nitride (AlN) ceramic substrate which has about 6 times the thermal conductivity of alumina, the conventional substrate material for chip resistors. In addition TFHP features large area terminations for improved thermal contact with a PCB. As a result, heat generated in the resistor element is effectively conducted away, reducing the temperature rise.

Available in 1206 and 2512 sizes and from 50R to 30K1, this product offers precision of 0.1% tolerance and 25ppm/°C TCR. In addition, the exceptional thermal properties reduce self-heating and contribute to a greatly reduced Power Coefficient of Resistance (PCR) under given mounting conditions

Applications:

- Precision power supply
- Battery cell balancing
- Power amplifier
- Process control

Benefits:

- The use of a high power density part reduces the PCB footprint required.
- Low thermal impedance minimises the temperature rise and enhances the reliability of the assembly.
- High overload withstand gives reliable product performance under high momentary load conditions.