HPDC Series – High Power Density Chip Resistors

2.4W in 1206 – 3.5W in 2512 – Aluminium Nitride substrate

HPDC series resistors use an aluminium nitride (AlN) ceramic substrate with about 6 times the thermal conductivity of alumina, the conventional substrate material. Also, they have large area terminations, improving thermal contact with a PCB.

This results in resistors with very high power density and excellent overload withstand. This product can also serve as a heater in a temperature regulated system.

FEATURES

- Aluminum nitride (AlN) substrate
- Wide area solder terminations
- Offers >3 x standard power density
- Power rating up to 3.5W @70°C
- Overload rating up to 7.7W for 5s
- Thick film element

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.

IDEAL APPLICATIONS

- Power supply
- Motor drive
- Actuator control
- Active capacitor bleed
- Power amplifier
- Local heater