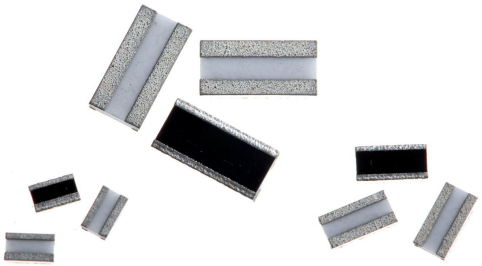
Fast Facts

WHPC

Thick Film High Power Chip Resistors: Extra-High-Power Range



Features:

- Three new inverse sizes—0508, 0612 & 1020
- Rating of 2W in 1020 footprint
- Rating of 1.5W in 0612 footprint
- Rating of 1W in 0508 footprint
- Tolerance down to 0.5%
- Robust thick film technology
- AEC-Q200 qualified

Description:

Three new types have been added to WHPC, a high-power thick film chip resistor series. Designated as WHPC0508X, WHPC0612X and WHPC1020X, these new types complement the existing standard range with an extra-high-power range.

Featuring inverse geometry with the terminations on the long sides, these chip resistors have very high thermal contact with the PCB in addition to low internal thermal impedance. As a result, it is possible to support two to three times conventional ratings for the same footprint, without relying on excessive PCB copper heatsink areas. For example, the 1020 size with terminal heatsinking copper areas of 80mm^2 is able to run at 2W continuous dissipation.

The three new WHPC types are fully AEC-Q200 qualified and offer a wide range of values from 1R0 to 1M0 and tolerances down to 0.5%.

Applications:

- Power supply
- Motor drive
- Actuator control
- Active capacitor bleed
- IGBT gate drive

Benefits:

- The use of a high power density part reduces the PCB footprint required.
- Low thermal impedance minimises the temperature rise and enhances reliability of the assembly.
- High surge tolerance of thick film technology gives reliable product performance under surge circuit conditions.