

LRMAP4026

Low Resistance Metal Alloy Power Resistors

Features:

- 5W rating at 70°C on FR4
- Values 0.2 to 3mΩ
- 4-terminal Kelvin gullwing terminations
- Robust welded construction
- TCR down to 50ppm/°C
- Hotspot distanced from PCB
- Low inductance
- AEC-Q200 qualified



Description:

LRMAP4026 is a high power, low value SMT shunt resistor. With values down to 200μΩ and a power rating on FR4 of 5W, the theoretical maximum measurable current is up to 158A, so in effect it is restricted only by the current carrying capacity of the PCB tracks. With 1% tolerance and 50ppm/°C, this product combines good precision with the high surge capacity of metal alloy technology.

Equivalent to Isabellenhütte BVR and Vishay WSL4026, this AEC-Q200 qualified part offers a robust shunt with hotspot distanced from the PCB to reduce board heating. The 4-terminal Kelvin terminations reduce the differences between unmounted and mounted resistance and TCR which can be experienced with 2-terminal types.

Available in 7 values from 0.2 to 3mΩ, LRMAP4026 gives designers a high degree of flexibility, and the wide temperature range of -65 to +170°C makes this rugged component suitable for demanding applications.

Applications:

- Power supply
- Motor drive
- Battery monitoring
- Solar cell monitoring
- Process control

Benefits:

- Spacing from PCB minimises the board temperature rise and enhances reliability of the assembly.
- High surge tolerance gives reliable product performance under inrush and momentary short circuit conditions.
- 4-terminal Kelvin connections improve precision meaning that a small part of the designer's error budget is consumed, enabling more design freedom elsewhere in the circuit.