



DID YOU KNOW?

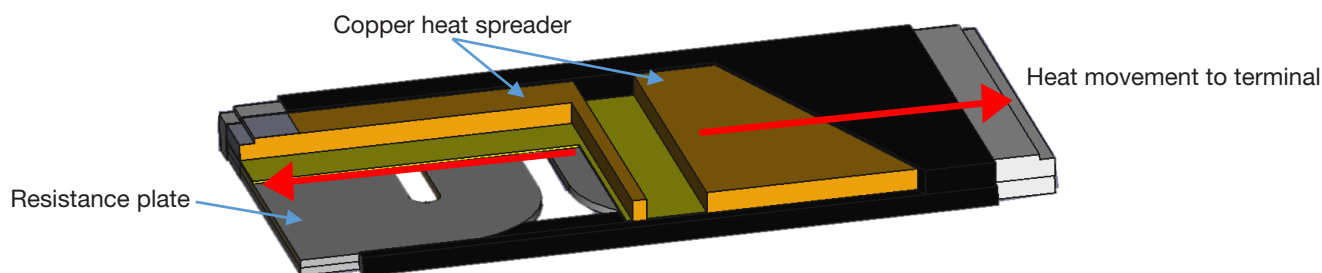
TWO KEY FEATURES OF WFM RESISTORS

Designers are continually striving to reduce board space and increase the power handling capability of their equipment, while simultaneously meeting ever-increasing long term stability requirements. The Power Metal Plate™ series has two key construction features that extend resistance range while supporting these higher power ratings for current sense applications.

Thermal Efficiency + Resistance Alloy = Life Time Stability

Thermally Efficient Design

Copper has a higher thermal conductivity than most metals. The copper plate of the WFM efficiently transfers the heat generated in the resistive element to the PCB, which enables a higher rated power for the standard footprint. This design minimizes hotspot temperature extremes, which leads to superior long term stability at higher rated power.



Resistance Alloy

Power Metal Plate current sense resistors use a nickel chromium alloy for resistance values of 33 mΩ and greater. This alloy has superior stability at higher operating temperatures (220 °C) than copper manganese alloys (185 °C), which provides two application benefits. First, WFM devices are able to withstand higher temperatures with less lifetime drift. Second, the resistors have improved pulse capability due to a greater element mass for the same resistance value.

The WFM extends the resistance range for high power surface-mount current sense applications.

