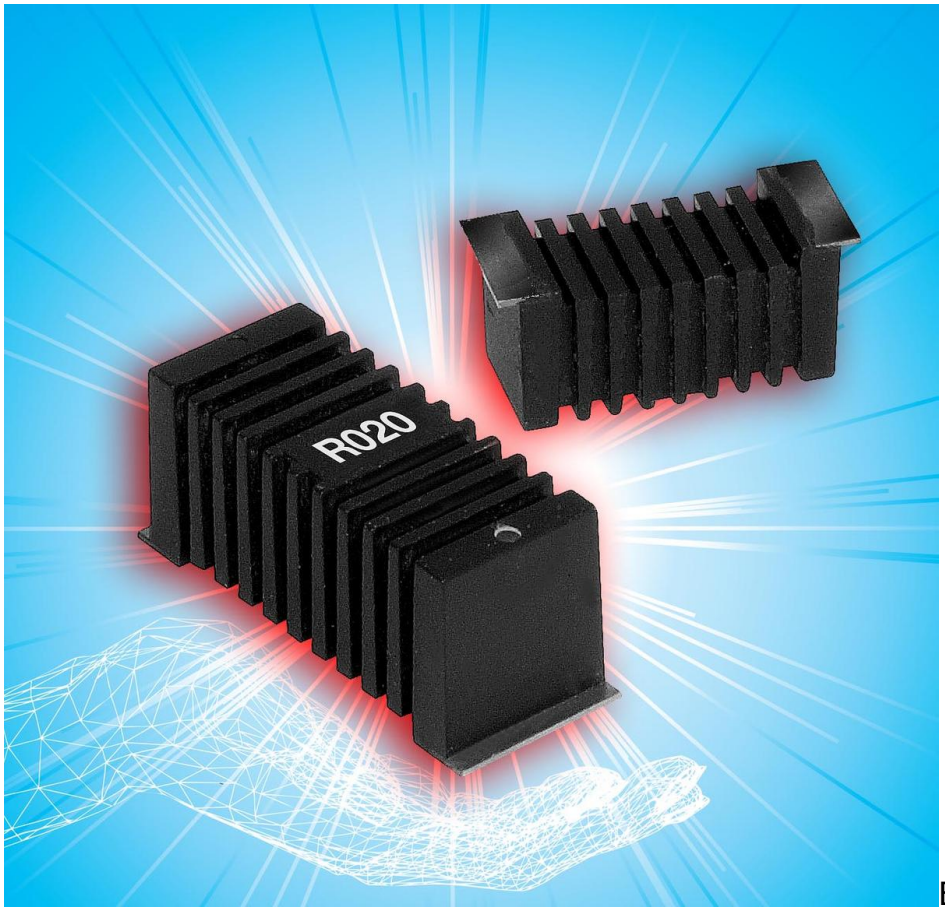
SMD Wirewound Resistor to Handle More Than 5W



By using very simple idea from their heatsink designs, Ohmite has developed an SMD wirewound resistor which meets a 5W plus power rating, providing a solution to a problem which has dogged resistor manufacturers for years.

In the past, the goal was to use the epoxy molded construction process from which resistor manufacturers derived all other power ratings (0.60-3.5 watts), but the task was not as easy as it appeared and testing showed that the 5W version of such a device would have to be very large, and probably impractical for most users to adopt.

However, Ohmite have now achieved new levels of power control by tooling a new body style which incorporates fins into the body of the resistor, creating an additional surface area to the resistor body without having to enlarge the footprint.

The 5W and 7W ratings which Ohmite are assigning to these two new sizes are claimed to be very conservative, and in testing over 1000 hours of continuous operation, the resistance drift is negligible (less than 1%), allowing customers to specify very tight tolerances along with the new, higher power ratings.

The manufacturers have even removed a couple of fins to allow for a flat zone on the top-centre of the resistor to enable its use on pick and place equipment.

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