Vishay Intertechnology Thick Film Power Resistors Deliver Increased Power Density to Save Space and Simplify Designs

August 20, 2026

Providing 650 W of Continuous Power, Devices Offer Customizable Cabling and Optional NTC Temperature Sensor Integration

MALVERN, Pa., Aug. 20, 2026 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new series of thick film power resistors that deliver an industry-leading 650 W of continuous power in a low profile package. Offering customizable cabling and optional temperature sensing integration, Vishay MCB RPWA 650 series devices reduce component counts, saving space while simplifying designs and assembly.

The high power capabilities and compact package of the devices released today allow designers to achieve higher power density, reducing the number of parallel resistors required. Their performance is supported by a “cold system” baseplate design that enables efficient heat transfer to an external heatsink (not supplied), maintaining stable operation over a wide temperature range from -55 °C to +155 °C.

To further streamline designs, RPWA 650 series devices integrate a power resistor and optional embedded NTC temperature sensor in a single housing. Customizable cabling and an easy-mount design with self-calibrating pressure eliminate the need for board-level soldering, reduce wiring and assembly complexity, and enable faster plug and play integration in power modules and assemblies.

Offering a wide range of resistance values from 6.2 Ω to 1 MΩ, with tolerances down to ± 5 %, the RPWA 650 series supports a variety of circuit functions, including precharge, discharge, active discharge, power conversion, and snubber operations. The devices are ideal for automotive, energy, industrial, medical, and avionics systems used in harsh environments.

The resistors provide high voltage capability with maximum operating voltage up to 6000 V_{DC}, dielectric strength to 7000 V_{RMS}, and typical self-inductance of ≤ 40 nH. For high voltage and fast-switching circuits, this combination enables accurate energy dissipation and minimizes transient overshoot. The devices also offer high pulse energy capability, supporting repetitive operation up to 3.5 J per pulse for 50 µs pulses. The RoHS-compliant resistors are pending AEC-Q200 qualification.

Samples and production quantities of the RPWA 650 series are available now, with lead times of 8 to 12 weeks.

Vishay manufactures one of the world’s largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.**® Vishay Intertechnology, Inc. is a Fortune 1000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

Vishay on Facebook: http://www.facebook.com/VishayIntertechnology
Vishay Twitter feed: http://twitter.com/vishayindust

Links to product datasheets:
http://www.vishay.com/ppg?32650 (RPWA 650)

Link to product photo:
https://www.flickr.com/photos/vishay/albums/72177720335093802

For more information please contact:
Vishay Intertechnology
Peter Henrici, +1 408 567-8400
peter.henrici@vishay.com
or
Redpines
Bob Decker, +1 415 409-0233
bob.decker@redpinesgroup.com