Vishay Intertechnology Thick Film Power Resistor With Optional NTC Thermistor and PC-TIM Simplifies Designs and Saves Board Space

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AEC-Q200 Qualified Device in Compact SOT-227B Package Offers High Pulse Handling Capability and Power Dissipation to 200 W

MALVERN, Pa., April 23, 2025 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new AEC-Q200 qualified thick film power resistor in the compact, low profile SOT-227B package for mounting on a heatsink. Available with an optional NTC thermistor for internal temperature monitoring and pre-applied Phase Change Thermal Interface Material (PC-TIM) for more efficient mounting, the Vishay MCB ISOA200 offers high pulse handling capability and high power dissipation up to 200 W at an 80 °C bottom case temperature.

Built on an exposed alumina substrate instead of a metal tab, the device released today lowers costs and weight for automotive, industrial, and avionics, military, and space (AMS) applications, in which it will serve as a precharge, discharge, active discharge, or snubber resistor. For applications subject to high and repetitive pulse surges, the resistor can handle high energy pulses up to 140 J for 0.1 s and is multi-pulsed tested. Additional custom testing options for the device are also available.

With the option to integrate an AEC-Q200 qualified, temperature cycle tested NTC thermistor inside the resistor package, the ISOA200 simplifies designs and saves board space, while its optional PC-TIM streamlines installation in production. The device's high power and high energy dissipation further simplify designs while lowering costs by reducing the need for power components.

The ISOA200 features a resistance range from 10 Ω to 1 MΩ, with tolerances of ± 5 % and ± 10 %, and TCR of ± 100 ppm/K and ± 150 ppm/K. The resistor offers a maximum operating voltage of 1500 V, an operating temperature range of -55 °C to +150 °C, and dielectric strength of 4000 Vrms. The RoHS-compliant device offers a non-inductive design and can include two different resistors.

Samples and production quantities of the new resistor are available now, with lead times of 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.

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Link to product datasheet:
http://www.vishay.com/ppg?32607 (ISOA200)

Link to product photo:
https://www.flickr.com/photos/vishay/albums/72177720325191869

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