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

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Designed for Mounting on a Heatsink, AEC-Q200 Qualified Device in Compact SOT-227 Package Offers High Pulse Handling Capability and Power Dissipation to 120 W

MALVERN, Pa., May 30, 2023 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new AEC-Q200 qualified thick film power resistor in the compact, low profile SOT-227 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 ISOA offers high pulse handling capability and high power dissipation up to 120 W at an 85 °C bottom case temperature.

Built on an exposed alumina substrate instead of a metal tab, the device released today lowers costs for automotive, industrial, and avionics, military, and space (AMS) applications, in which it will serve as a precharge, discharge, active discharge, or snubber resistor. With the option to integrate an AEC-Q200 qualified, temperature cycle tested NTC thermistor inside the resistor package, the ISOA simplifies designs and saves board space, while its optional PC-TIM streamlines installation in production.

The device's high power and high energy dissipation simplifies designs and lowers costs by reducing the need for power components. For applications subject to high and repetitive pulse surges, the resistor can handle high energy pulses (i.e., 110 J for 0.1 s) and is multi-pulsed tested at 230 J for 670 ms and 3000 cycles and 350 J for 1060 ms and 5000 cycles. Additional custom testing options for the device are also available.

The ISOA features a resistance range from 0.47 Ω to 1 MΩ, with tolerances of ± 5 % and ± 10 %, and TCR of ± 100 ppm/K, ± 150 ppm/K, and ± 300 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 15 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 1,000 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?32598 (ISOA)

Link to product photo:
https://www.flickr.com/photos/vishay/albums/72177720308546964

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