



Vishay Intertechnology Increases Resistance Ratios and Operating Voltages for ACAS AT Precision Thin Film Chip Resistor Arrays

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Automotive Grade Devices Increase Design Capability in Voltage Divider and Signal Amplification Applications

MALVERN, Pa., Feb. 22, 2021 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today announced that the company has enhanced its [ACAS 0606 AT and ACAS 0612 AT](#) precision Automotive Grade thin film chip resistor arrays with higher resistance ratios up to 1:100 and operating voltages up to 100 V. The Vishay Beyschlag devices provide designers with greater flexibility by allowing them to use a broader range of input voltages in voltage divider applications or to achieve a five-fold amplification factor increase compared to previous-generation devices.

Offering respectively two and four integrated resistors on one substrate, the Vishay Beyschlag ACAS 0606 AT and ACAS 0612 AT lower costs when compared to using multiple high-precision discrete resistors, while at the same time their stable divider ratio improves application stability. For increased accuracy, the AEC-Q200 qualified resistor arrays combine their high temperature operation to +155 °C with tight absolute tolerance of $\pm 0.1\%$, relative tolerance of $\pm 0.05\%$, absolute TCR down to ± 10 ppm/K, and relative TCR down to ± 5 ppm/K. The devices offer resistance from 47 Ω to 150 k Ω , with equal or different resistor values.

In addition to excellent high temperature performance, the ACAS 0606 AT and ACAS 0612 AT are extremely robust against harsh environmental conditions. The devices provide superior moisture resistivity of $\Delta R/R < 0.5\%$ at +85 °C and 85 % relative humidity for 1000 hours, and advanced sulfur resistance in accordance with ASTM B 809. The resistor arrays offer a 1000 V ESD capability and maximum rated dissipation to 0.125 W per element.

The ACAS 0606 AT and ACAS 0612 AT are ideally suited for precision analog circuits, voltage dividers, signal conditioning, OpAmp, and feedback circuit applications that require extraordinarily stable fixed resistor ratios. Typical applications include automotive electronics (such as engine control units, gearbox controls, safety, power supply electronics, body electronics, braking systems, climate control, steering technology, and lighting), audio equipment and instrumentation, and industrial electronics including battery measurement systems, sensors, scales, and precision amplifiers.

Samples and production quantities of the enhanced resistors are available now, with lead times of eight 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/ppg228770> (ACAS 0606 AT, ACAS 0612 AT)

Link to product photo:

<https://www.flickr.com/photos/vishay/albums/72157718316583946>

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