

# Automotive-Qualified 200 V Qspeed Diodes from Power Integrations Excel in Audio Amplifiers

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Low-noise, high-efficiency, AEC-Q101 diodes solve thermal, EMI and distortion challenges in power amplifiers

SAN JOSE, Calif.--(BUSINESS WIRE)-- Power Integrations (Nasdaq: **POWI**), the leader in high-voltage integrated circuits for energy-efficient power conversion, today announced that its 200 V **Qspeed™** diodes – LQ10N200CQ and LQ20N200CQ – are now available with AEC-Q101 automotive qualification. Qspeed silicon diodes use merged-PIN technology to offer a unique balance of soft switching and low reverse recovery charge (Qrr). This results in low EMI and reduced output noise, which is especially important for in-vehicle audio systems.

This press release features multimedia. View the full release here:

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Automotive-qualified 200 V Qspeed diodes from Power Integrations excel in audio amplifiers. Low-noise, high-efficiency, AEC-Q101 diodes solve thermal, EMI and distortion challenges in power amplifiers. (Photo: Business Wire)

The newly qualified 200 V diodes feature the industry's lowest reverse recovery charge, typically 32.4 nC at TJ of 125°C,

and a diode softness ratio of 0.39. This minimizes high-frequency EMI inherent in the Schottky rectifiers often used in Class-D power amplifier output stages. Dual 10 A and 20 A common-cathode diodes are housed in the industry-standard, rugged DPAK TO-252 package.

Comments Edward Ong, product marketing manager at Power Integrations: "The automotive audio industry has been clamoring for an alternative to Schottky diodes with their 'snappy' reverse recovery, which causes ringing that generates EMI and noise in sensitive Class D amplifiers. Our automotive-qualified 200 V QSpeed diodes are the perfect solution for in-car audio amplification applications."

The LQ10N200CQ and LQ20N200CQ diodes are produced in IATF 16949-certified facilities. Devices are available now; the LQ10N200CQ and LQ20N200CQ are priced at \$0.60 and \$0.74 respectively in 10,000 quantities. Technical support is available from the Power Integrations website at: <http://www.power.com/products/qspeed-q-series>.

## About Power Integrations

**Power Integrations, Inc.** is a leading innovator in semiconductor technologies for high-voltage power conversion. The company's products are key building blocks in the clean-power ecosystem, enabling the generation of renewable energy as well as the efficient transmission and consumption of power in applications ranging from milliwatts to megawatts. For more information please visit [www.power.com](http://www.power.com).

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