

PRESS RELEASE

NextPower 100V power MOSFETs from Nexperia feature low Q_{rr} , and high 175°C rating

Nextgen devices improve switching efficiency, increase reliability and reduce EMI

Nijmegen, February 27, 2018: Nexperia, the former Standard Products division of NXP, today announced its NextPower 100 V family of power MOSFETs which delivers low reverse recovery charge (Q_{rr}) and includes parts that are qualified to 175°C in the LFPAK56 (PowerSO8) package.

NextPower 100 V MOSFETs are Nexperia's latest generation parts recommended for high efficiency switching and high reliability applications. With 50% lower $R_{DS(on)}$ and strong avalanche energy rating, they are ideally suited for power supply, telecom and industrial designs, especially suiting USB-PD Type-C chargers and adaptors and 48 V DC-DC adaptors. The devices feature low body diode losses with Q_{rr} down to 50 nano-coulombs (nC) - resulting in lower reverse recovery current (I_{RR}), lower voltage spikes (V_{peak}) and reduced ringing which allows for further optimised dead-time.

Comments Mike Becker, Product Manager for Power MOSFETs: " Q_{rr} is a frequently overlooked parameter, yet it can have a significant effect on many design aspects. Low spiking means EMI is reduced, while optimised dead-time gives further efficiency gains, which is our driving ambition at Nexperia. We have shown that low Q_{rr} is beneficial to both functions."

The new NextPower 100 V MOSFETs are available in three packages: TO220 and I2PAK thru-hole devices, and the widely acclaimed LFPAK56 package (SMT). All package variants feature $T_{j(max)}$ of 175°C, and fully meet the extended temperature requirements of IPC9592, making NextPower 100 V MOSFETs especially suitable for telecom and computing applications.

NextPower MOSFETs are available now, please visit <https://efficiencywins.nexperia.com/efficient-products/qrr-overlooked-and-underappreciated-in-efficiency-battle.html>

About Nexperia

Nexperia, the former Standard Products division of NXP, is a dedicated global leader in Discretes, Logic and MOSFETs devices. The company became independent at the beginning of 2017. Focused on efficiency, Nexperia produces consistently reliable semiconductor components at high volume: 85 billion annually. Our extensive portfolio meets the stringent standards set by the Automotive industry.



Industry-leading, miniature packages, produced in our own manufacturing facilities, combine power and thermal efficiency with best-in-class quality levels.

With over 50 years history supplying to the world's biggest companies, Nexperia has 11,000 employees across Asia, Europe and the U.S., offering global support. The company has an extensive IP portfolio and is certified to ISO9001, ISO/TS16949, ISO14001 and OHSAS18001.

Nexperia: Efficiency wins.

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