

New 175°C AEC-Q101 MOSFETs in miniature leadless packages from Nexperia enable automated inspection

Replace larger SO8 and SOT223 devices

Nijmegen, September 13, 2018: Nexperia, the global leader in discretes, logic and MOSFET devices, today announced the industry's first AEC-Q101-qualified MOSFETs that are both rated for use at up to 175 °C and are available in the AOI-compatible DFN2020 package (DFN = Discrete Flat No leads). More, the new devices measure just 2 mm x 2 mm, much smaller and lighter than SOT223 and SO8-packages yet with comparable electrical and thermal performance.

Many leadless packages cannot be inspected using AOI techniques, so Nexperia pioneered the development of the DFN2020 package with side-wettable flanks (SWF), enabling Automatic optical inspection (AOI) – a critical automotive industry requirement – to be employed. Packages with SWF are now a proven, accepted solution.

Comments Malte Struck, Nexperia's product manager for small signal MOSFETs: "The DFN package with side-wettable flanks is gaining significant traction with automotive manufacturers as it saves space and can be automatically inspected. Our new 175 °C parts are being used in under-the-hood applications, especially near the engine or gearbox. The unique offering of an automotive-grade MOSFET that is both qualified to 175 °C and which incorporates side-wettable flanks makes the DFN2020 additionally suitable for a wide range of medium-power automotive applications."

The new automotive-qualified parts extend Nexperia's low and medium power MOSFET portfolio. Six 40 V and 60 V devices are available with the higher temperature rating and automotive approval, each with low RDS(on) of between 20 m Ω and 40 m Ω .

More information on the new DFN2020 MOSFETs (BUKxxx) including product specs and datasheets is available at https://efficiencywins.nexperia.com/efficient-products/DFN2020-Automotive-MOSFETs.html

About Nexperia

Nexperia, the former Standard Products division of NXP, is a dedicated global leader in Discretes, Logic and MOSFET devices. The company became independent at the beginning of 2017. Focused on efficiency, Nexperia produces consistently reliable semiconductor components at high volume: 90 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 over 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.

For press information, please contact:

Nexperia

Petra Beekmans, Head of Communications & Branding

Phone: +31 6 137 111 41

Email: petra.beekmans@nexperia.com

Agency: BWW Communications

Nick Foot, director +44-1491-636393

Nick.foot@bwwcomms.com