

Product brief

StrongIRFET™ 2 MOSFETs – 80 V/100 V

Right-fit products for a broad range of applications

The StrongIRFET™ 2 in TO-220 and TO-220 FullPack packages are the new generation of Power MOSFET technology addressing a wide range of applications such as adapter, TV, motor drives, e-scooter, battery management, light electric vehicles, robotics, power and gardening tools.

Introducing broad availability and excellent price/performance ratio, this new technology offers right-fit products with an easy choice for designers interested in convenient selection and purchasing. Optimized for both low and high switching frequencies, the family supports a broad range of applications enabling flexibility in design. This new technology offers 40% $R_{DS(on)}$ improvement and over 50% lower Q_g compared to the previous StrongIRFET™ devices, translating into higher power efficiency for improved overall system performance. Increased current ratings allow for higher current carrying capability which eliminated the need to parallel multiple devices translating to lower BOM costs and board savings.

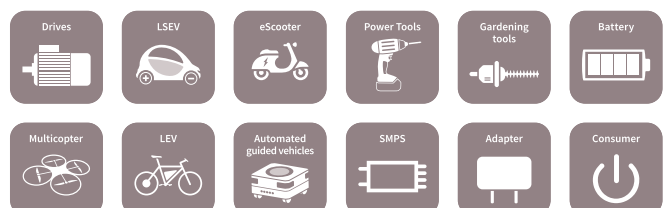
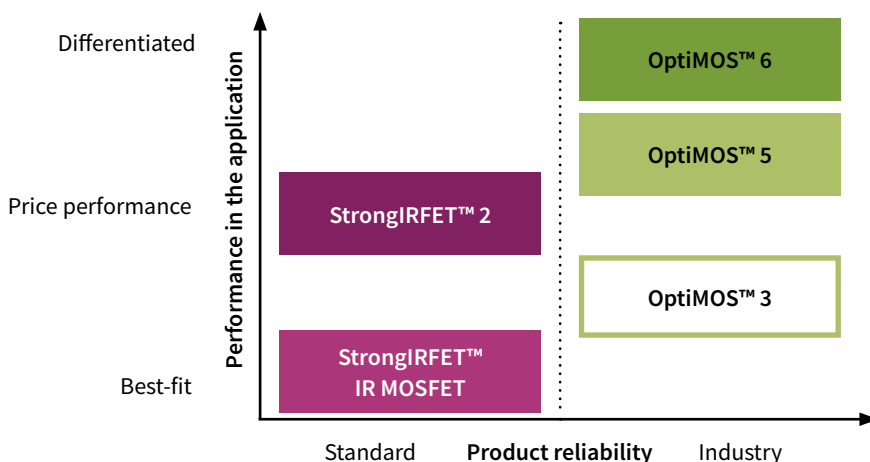
Key features

- > Broad availability from distribution partners
- > Excellent price/performance ratio
- > Ideal for high and low switching frequency
- > Industry standard footprint through-hole package
- > High current rating

Key benefits

- > Increased security of supply
- > Right-fit products
- > Supports a wide variety of applications
- > Standard pinout allows for drop-in replacement
- > Increased product ruggedness

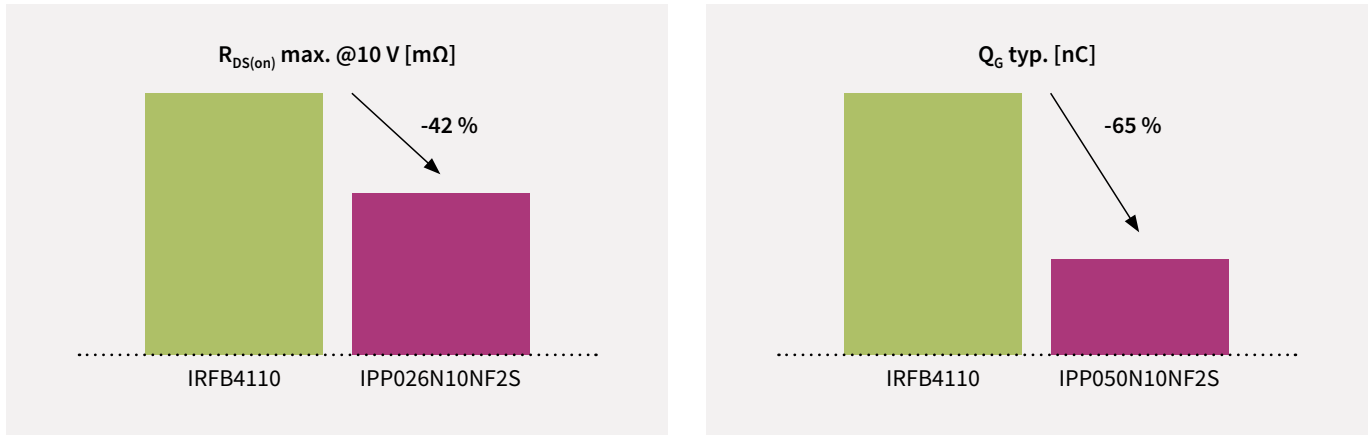
OptiMOS™ and StrongIRFET™ – addressing different customer requirements



StrongIRFET™ 2 MOSFETs – 80 V/100 V



Right-fit products for a broad range of applications

StrongIRFET™ 2 vs. previous generation 100 V performance comparison



Compared to the previous StrongIRFET™ generation in 100 V TO-220 package, StrongIRFET™ 2 shows significant improvements such as ~40 % lower $R_{DS(on)}$ and ~65% reduced Q_G . This results in better efficiency and longer life time.

Product portfolio

Package	Voltage [V]	Part number	$R_{DS(on)}$ max. [mΩ]
 TO-220	80 V	IPP016N08NF2S	1.6 mΩ
		IPP019N08NF2S	1.9 mΩ
		IPP024N08NF2S	2.4 mΩ
		IPP040N08NF2S	4.0 mΩ
		IPP055N08NF2S	5.5 mΩ
	100 V	IPP026N10NF2S	2.6 mΩ
		IPP050N10NF2S	5.0 mΩ
		IPP082N10NF2S	8.2 mΩ
		IPP129N10NF2S	12.9 mΩ
 TO-220 FullPAK	100 V	IPA030N10NF2S	3.0 mΩ
		IPA082N10NF2S	8.2 mΩ

Published by
Infineon Technologies Austria AG
9500 Villach, Austria

© 2021 Infineon Technologies AG.
All Rights Reserved.

Please note!

This document is for information purposes only and any information given herein shall in no event be regarded as a warranty, guarantee or description of any functionality, conditions and/or quality of our products or any suitability for a particular purpose. With regard to the technical specifications of our products, we kindly ask you to refer to the relevant product data sheets provided by us. Our customers and their technical departments are required to evaluate the suitability of our products for the intended application.

We reserve the right to change this document and/or the information given herein at any time.

Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.