



Product Brief

40 V StrongIRFET[™] MOSFETs in D²PAK 7pin+ package Technology for battery powered applications

The new 40 V StrongIRFET[™] MOSFETs in D²PAK 7pin+ package offers extremely low R_{DS(on)} and the industry's highest current carrying capability for the industrial market. These devices expand upon an already diverse package offering providing designers flexibility in selecting the most optimal device for their application. The D²PAK 7pin+ package is optimized to allow up to a 20 percent larger die than a standard D²PAK 7pin package, leading to 15 percent lower R_{DS(on)} and up to 39 percent lower thermal resistance from junction to PCB.

This family is ideal for applications requiring high current capability, high efficiency and reliability in a surface mount package. Target applications include low voltage drives and power tools.

350 300 250 Temperature [°C] 200 150 100 50 0. 150 200 250 300 350 400 450 Current [A] D²PAK 7pin+ D²PAK 7pin

Package current versus temperature

Key features and benefits

- > Best-in-class R_{DS(on)}
- High current carrying capability, highest in the industry
- Interchangeable with traditional
 D²PAK 7pin package and competitor's
 H²PAK package
- > Multiple lead trim options
- Softer body diode improved performance in low frequency applications
- > Logic level capable threshold voltage for ease-of-drive

Target applications

- > Low voltage drives
- > Power tools



40 V StrongIRFET™ MOSFETs in D²PAK 7pin+ package

Technology for battery powered applications

Product portfolio highlights

The 40 V StrongIRFET[™] family of power MOSFETs features increased robustness and reliability for high power density applications. The interchangeable pinout options allow for design flexibility.



StrongIRFET[™] in D²PAK 7pin+ package portfolio

D ² PAK 7pin+ package pinout	Product name	V _{DSS} [V]	R _{DS(on)} (max.) @ V _{GS} = 10 V [mΩ]	R _{DS(on)} (max.) @ V _{GS} = 4.5 V [mΩ]	l _D (max.) [A]	Logic level
1021 MYMI	IRL40SC228	40	0.65	0.90	360	Yes
	IRL40SC209	40	0.8	1.10	300	Yes

Published by Infineon Technologies Austria AG 9500 Villach, Austria

© 2017 Infineon Technologies AG. All Rights Reserved.

Order Number: B116-I0364-V1-7600-AP-EC-P Date: 04/2017

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 lifeendangering 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.