Product Brief

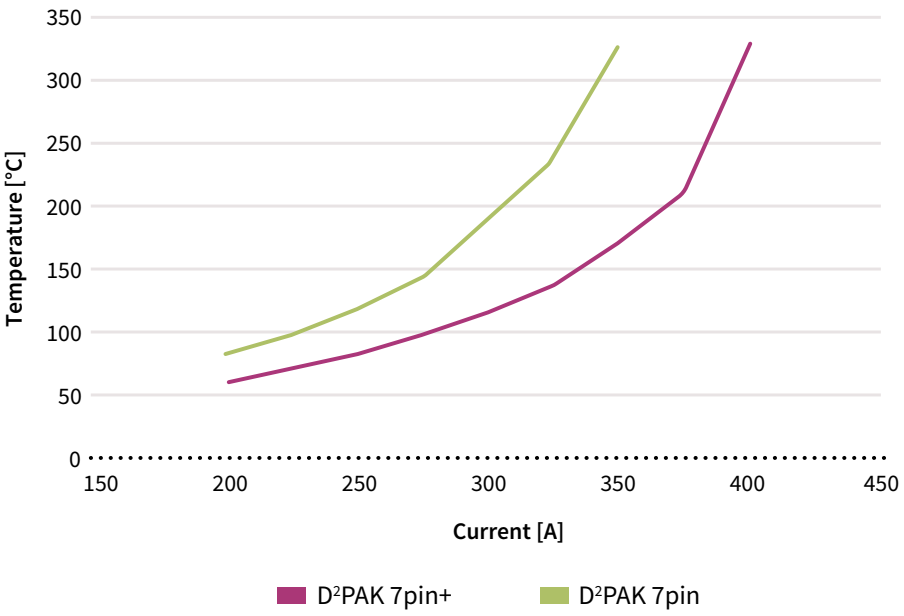
40 V StrongIRFET™ MOSFETs in D²PAK 7pin+ package

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.

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

www.infineon.com/strongirfet

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

D²PAK 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]	I_D (max.) [A]	Logic level
	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

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

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.