



## Product Brief

# 60 V StrongIRFET™ power MOSFET family

Benchmark performance technology for battery powered applications

The StrongIRFET™ MOSFET portfolio includes 60 V devices for a wide variety of industrial applications including power tools, light electric vehicle (LEV) inverters, DC motor drives, Li-Ion battery pack protection and switched mode power supply (SMPS) secondary-side synchronous rectification.

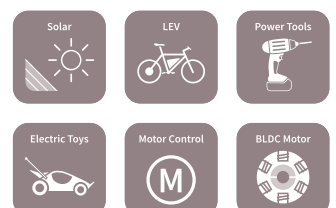
The new family of 60 V StrongIRFET™ power MOSFETs feature ultra-low on-state resistance ( $R_{DS(on)}$ ) for improved performance in low frequency applications, very high-current carrying capability, soft body diode, and 3 V typical threshold voltage to improve noise immunity. Each device in the family is 100 percent avalanche tested at industry highest avalanche current levels to ensure the most robust solution for demanding industrial applications. The devices are available in through hole and surface mount packages.

### Key features and benefits

- > Designed for industrial applications
- > Ultra-low  $R_{DS(on)}$  at par with best in the market for some voltage nodes
- > High-current carrying capability, highest in the industry for some packages
- > Wide portfolio offers competitive pricing
- > Can compete with the older planar solution in most sockets
- > Softer body diode improved performance in low frequency applications
- > 3 V typical threshold voltage to improve noise immunity

### StrongIRFET™ family attributes

Low $R_{DS(on)}$	Designed for industrial applications	High current carrying capability
Ideal for low switching frequency		Rugged silicon



# 60 V StrongIRFET™ power MOSFET family

## Benchmark performance technology for battery powered applications

### Product portfolio for through hole packages

Package	Part number	$R_{DS(on)}$ (max) at 10 V <sub>GS</sub> [mΩ]	I <sub>D</sub> (max) [A]
TO-220	IRFB7530PBF	2.0	195
	IRFB7534PBF	2.4	
	IRFB7537PBF	3.3	
	IRFB7540PBF	5.1	110
	IRFB7545PBF	5.9	85
	IRFB7546PBF	7.3	75
	IRF60B217*	9.0	60
TO-247	IRFP7530PBF	2.0	195
	IRFP7537PBF	3.3	

### Product portfolio for surface mount packages

Package	Part number	$R_{DS(on)}$ (max) at 10 V <sub>GS</sub> [mΩ]	I <sub>D</sub> (max) [A]
D <sup>2</sup> PAK 7pin	IRFS7530TRL7PP	1.4	240
	IRFS7534TRL7PP	1.9	
D <sup>2</sup> PAK	IRFS7530PBF	2.0	195
	IRFS7534PBF	2.4	
	IRFS7537PBF	3.3	
	IRFS7540PBF	5.1	110
DPAK	IRFR7540TRPBF	4.8	71
	IRFR7546TRPBF	7.9	
	IRF60R217*	9.9	
PQFN 5x6	IRFH7085TRPBF	3.2	100
	IRFH7545TRPBF	5.2	85
M-Can DirectFET™ (ME)	IRF7580MTRPBF	3.6	116

\*New products added to the portfolio

Published by  
Infineon Technologies Austria AG  
9500 Villach, Austria

© 2016 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](http://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.