



Product brief

200 V to 300 V StrongIRFET™ in TO-247

A package optimized for greater than 1 kVA, high-power applications

Infineon's new 200 V to 300 V TO-247 StrongIRFET™ family of devices complements an already successful line of products targeted at high-power applications including Uninterruptible Power Supplies (UPS), solar power inverters, class D audio amplifiers, Switched Mode Power Supplies (SMPS) and DC motor drives for battery-powered circuits.

The IRF200P222 (200 V, 6.6 mΩ, 182 A) is the latest flagship product. It is optimized for both high current-carrying capability and low $R_{DS(on)}$, making it the ideal solution for high-power applications. When compared to previous generation devices, it offers a 40 percent increase in current-carrying capability and 32 percent lower $R_{DS(on)}$, leading to increased power density and reduction in I^2R losses.

Features

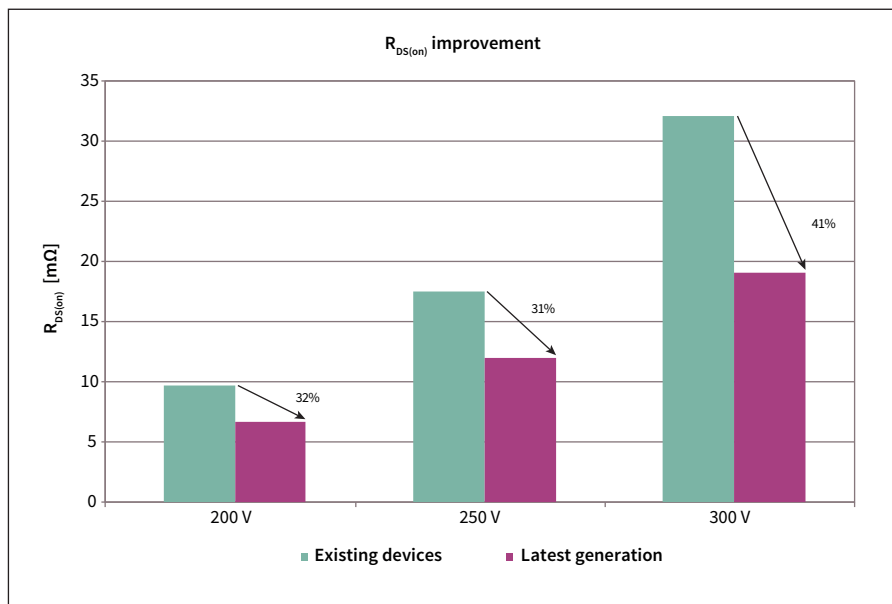
- > $R_{DS(on)}$ as low as 6.6 mΩ at 200 V
 - 32 percent improvement on previous generations
- > Current-carrying capability as high as 182 A at 200 V
 - 40 percent improvement on previous generations
- > Comprehensive portfolio including best-in-class and price/performance-optimized devices
- > Industry-standard footprint
- > Product validation according to JEDEC standard
- > Optimized for broadest availability from distribution partners

Benefits

- > Reduced conduction losses
- > Increased power density
- > Wide variety of options and design choices
- > Accommodates legacy designs

Applications

- > Uninterruptible Power Supply (UPS)
- > Solar power inverter
- > Class D audio amplifier
- > Switched Mode Power Supply (SMPS)
- > Brushed and BLDC motor drive
- > Battery-powered circuits

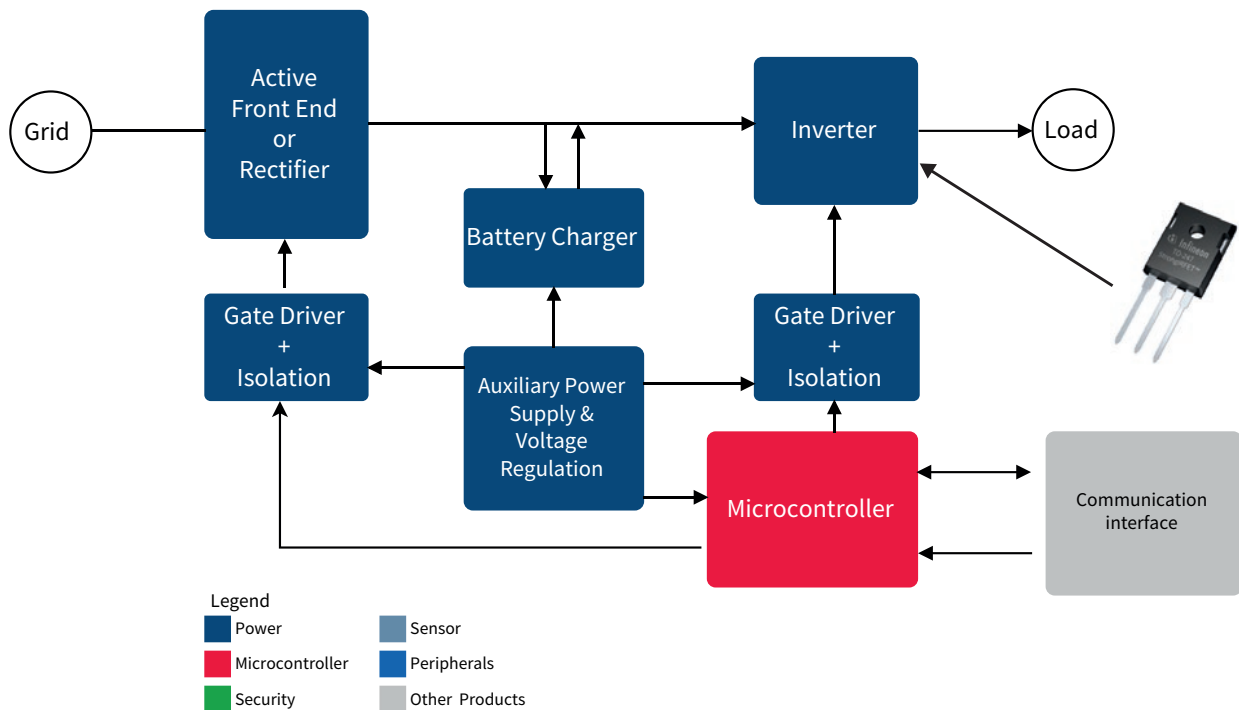


Product portfolio StrongIRFET™ 200 V to 300 V TO-247 – new devices highlighted with an asterisk (*) below

Voltage [V]	Part number	$R_{DS(on) \text{ max.}}$ [mΩ]	I_D [A]
200	IRF200P222*	6.6	182
	IRFP4668	9.7	130
	IRF200P223*	11.5	100
	IRFP4127	21.0	75
	IRFP4227	25.0	65
250	IRF250P224*	12.0	96
	IRFP4768	17.5	93
	IRF250P225*	22.0	69
	IRFP4332	33.0	57
	IRFP4229	46.0	44
300	IRF300P226*	19.0	75
	IRFP4868	32.0	70
	IRF300P227*	40.0	50
	IRFP4137	69.0	38

A typical high-power UPS application

The new 200 V to 300 V StrongIRFET™ devices are located within the inverter block. They are used in conjunction with a transformer to convert the DC supply voltage to AC.



Published by
Infineon Technologies AG
81726 Munich, Germany

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