



Product brief

StrongIRFET™ 200 V–300 V in TO-247

A package optimized for >1 kVA, high power industrial applications

Infineon introduces an extension to their successful StrongIRFET™ 200 to 300 V family of devices targeted at high power industrial 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.

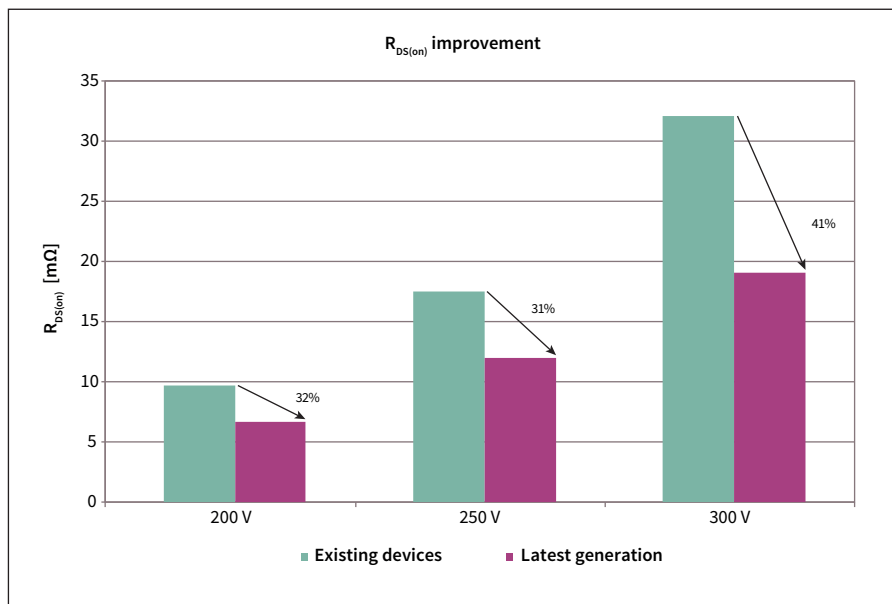
The IRF200P222 is the latest flagship product. It is optimized for both high current and low $R_{DS(on)}$ making it the ideal solution for industrial applications. When compared to previous generation devices, it offers a 40 percent increase in current carrying capability and 32 percent lower $R_{DS(on)}$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

Key features and benefits

- > Designed for industrial applications
- > Low $R_{DS(on)}$ for reduced conduction losses
 - 6.6 mΩ @ 200 V
 - 32 percent improvement versus previous generations
- > High-current carrying capability
 - 182 A @ 200 V
 - 40 percent improvement versus previous generations
- > 175°C junction temperature rated
- > Gate, avalanche, and dynamic dV/dt ruggedness
- > Fully characterized capacitance and avalanche SOA
- > Wide portfolio supports best in class and cost optimized designs
- > Industry standard footprint to accommodate 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

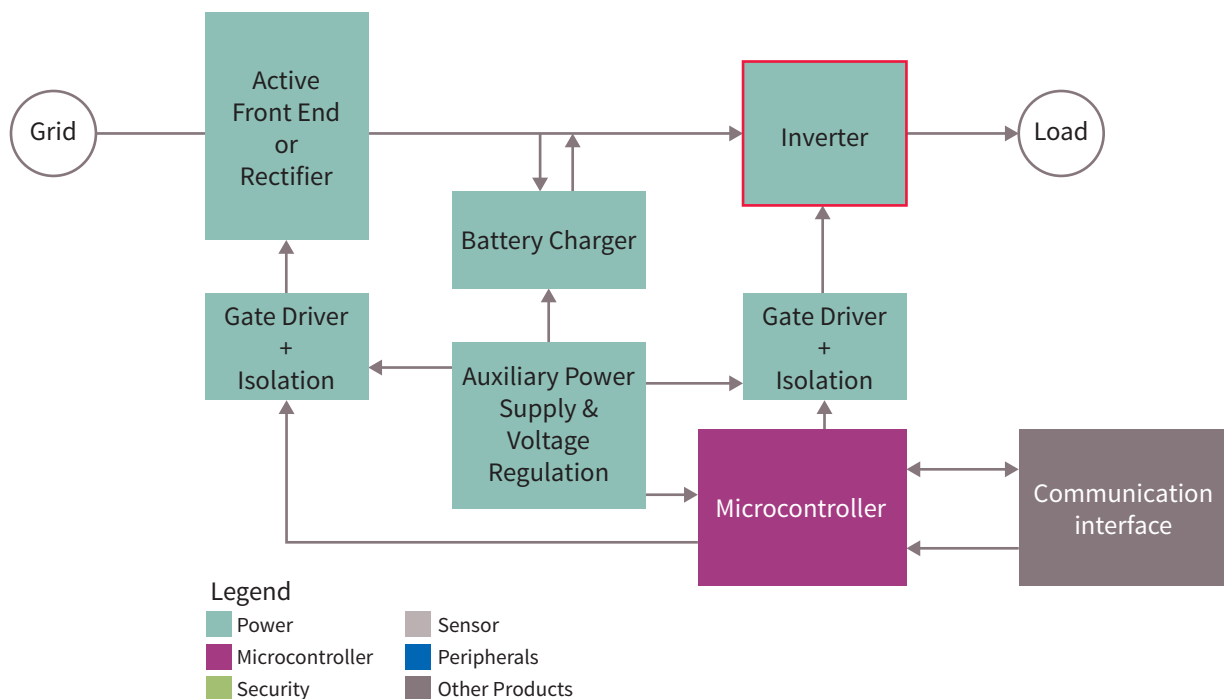


Product portfolio StrongIRFET™ 200 V–300 V TO-247

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 uninterruptible power supply application

The new 200 V-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.



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