PRODUCT BRIEF

OptiMOS™ 5 150 V power MOSFET in DirectFET™ IRF150DM115

Infineon's high performance top-side cooling package

The DirectFET™ package features a uniquely simple construction that minimizes package resistance and parasitic inductance, resulting in excellent electrical and thermal performance. The DirectFET™ metal "can" construction enables top-side cooling, effectively increasing efficiency and current-carrying capability. Moreover, DirectFET™ is compatible with today's high-volume manufacturing processes.

The new OptiMOS™ 5 150 V is engineered for a breakthrough reduction in $R_{DS(on)}$ and Q_{rr} without compromising FOM_{gd} and FOM_{OSS}, streamlining design efforts and optimizing system efficiency. With an ultra-low reverse recovery charge that enhances commutation ruggedness and improves EMI, this latest generation also ensures improved reliability compared to its predecessors. **Fully qualified for industrial standards**, the OptiMOS™ 5 150 V sets a new benchmark for performance and reliability across diverse applications.

DirectFET™ package paired with OptiMOS™ 5 150 V silicon technology is an ideal choice for a wide range of applications where thermal behavior, energy efficiency, and power density are crucial. These applications include solar micro inverters, solar optimizers, synchronous rectification, VRM for servers, DC-DC converters, Or-ing switches, circuit breakers, desktop PCs, workstations, mainframes, as well as motor drive traction inverters.

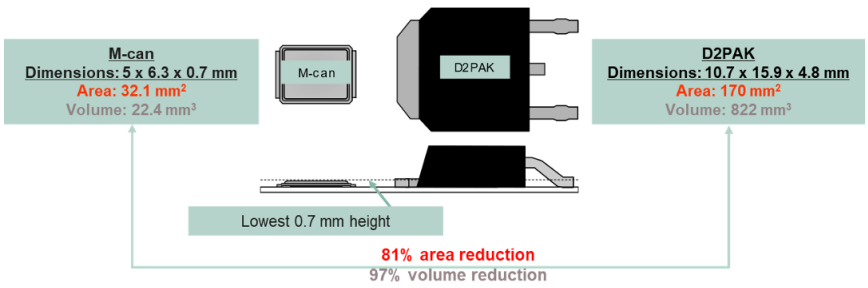
Key features

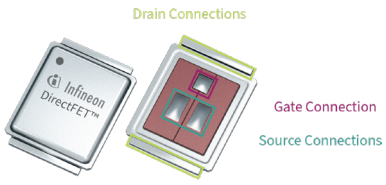
- Low package resistance
- Low parasitic inductance
- Top-side cooling
- Low profile design
- Best die to package size ratio
- High current capability
- 100% Pb free

Key features

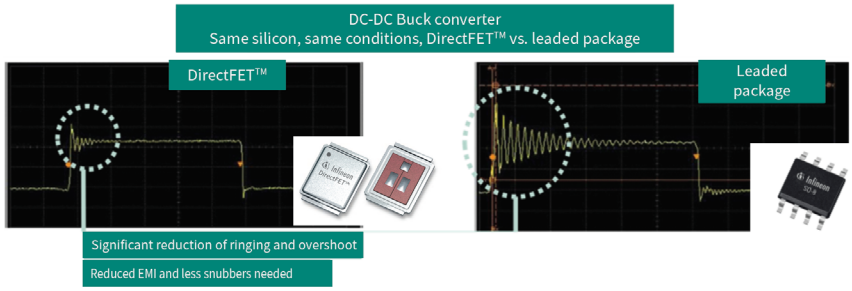
- High efficiency
- High power density
- Minimized EMI
- Optimized thermals
- Board space reduction
- Less snubbers needed
- Reduced system costs

Smallest footprint





Lowest parasitic resistance and inductance



www.infineon.com/DirectFET

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