

ACEPACK MODULES WITH SiC MOSFETs



Enabling more compact and efficient system solutions



Compact, high-performance power modules for simple, efficient and rugged power inverter designs up to 30 kW

Our ACEPACK power modules leverage the innovative properties of silicon carbide (SiC) and a high-thermal performance substrate resulting in a good low on-resistance per area and switching performance that is virtually independent of temperature.

With an embedded NTC thermistor, these highly reliable power modules offer the best compromise between conduction and switching loss, maximizing the efficiency of any converter system up to 30 kHz.

ST offers new SiC-based power modules in several topologies such as fourpack, half-bridge, sixpack and converter inverter brake (CIB) topologies ensuring a compact design and cost-effective system.

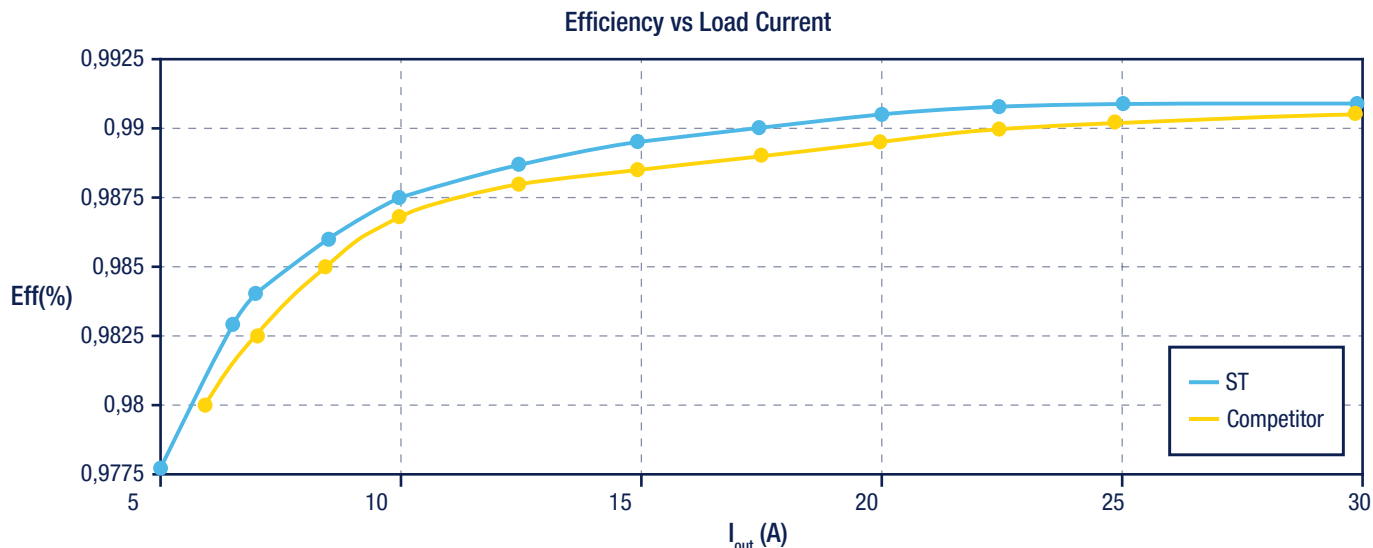
KEY FEATURES & BENEFITS

- High-power density
- High reliability and robustness
- Compact design and cost-effective system approach
- High flexibility enabling developers to implement several topologies
- Simplified, reliable, and durable mounting
- Press FIT and solderable pins

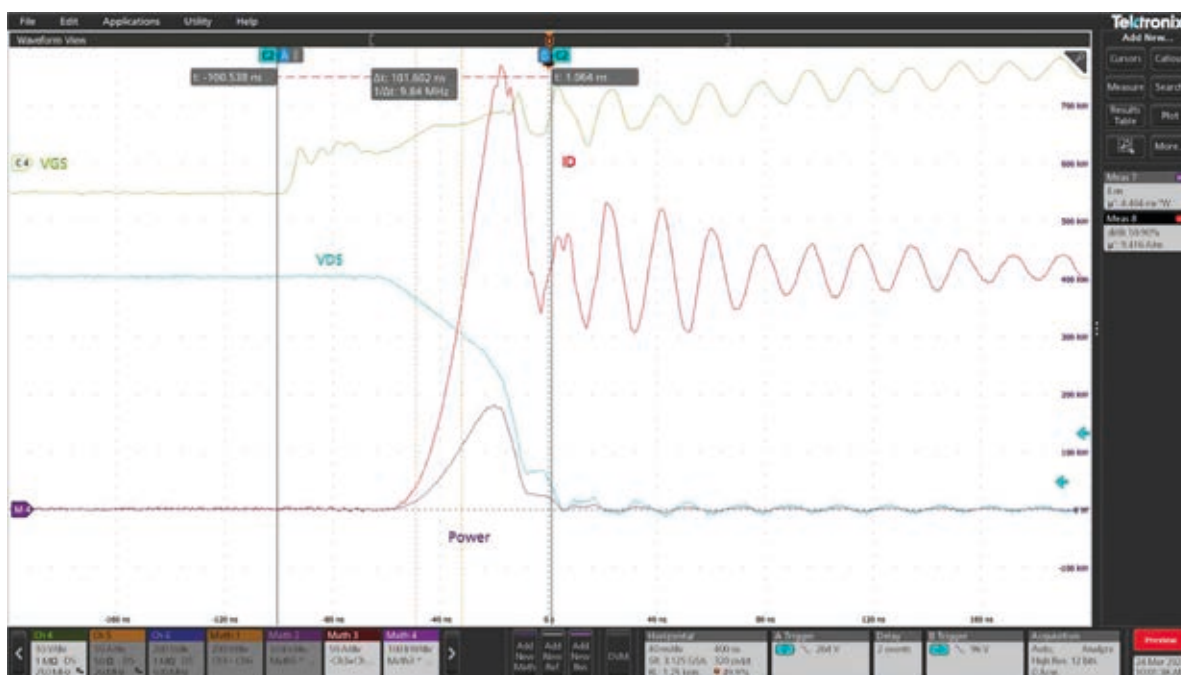
KEY APPLICATIONS

- Industrial motor drives
- Solar inverters
- Uninterruptible power supplies (UPS)
- Charging stations

The performance of ST power modules vs Competitor's is better in terms of efficiency vs high-current load.



Switching-on behavior



A2F12M12W2-F2 shows very low losses on turn on

Products offer

Part number	Internal configuration	Package	Voltage (V)	Drain current (A)	R _{DS(on)} (mΩ)
A2F12M12W2-F1	Fourpack topology	ACEPACK 2	1200	75	13
A2U12M12W2-F2	3-level topology	ACEPACK 2	1200	75	13



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