

AUTOMOTIVE STripFET F8 DEVICES



For high-power-density
solutions



Reduced on-resistance and switching losses, and optimized body diode for very low noise operation

The advanced STripFET F8 technology ensures lowers output capacitance, which helps reduce voltage spikes across the drain source and decrease energy losses during charge-discharge cycles.

This new low-voltage MOSFET series features an enhanced body-drain diode that improves softness during switching to further reduce electromagnetic interference.

These performance improvements help designers meet EMC requirements and simplify compliance verification processes associated with various low-voltage automotive applications.

KEY FEATURE & BENEFITS

- 40 and 100 V power MOSFET
- Optimized gate charge for faster commutation speeds
- Higher immunity to undesired spurious turn-on
- Lower $R_{DS(on)}$ for higher system efficiency
- AEC-Q101 qualified

KEY APPLICATIONS

- Automotive motor control
- Heating systems
- Braking
- 48 V mild hybrid systems

The STripFET family now includes the new STripFET F8 series, available in 40 V and 100 V variants. These new models are distinguished by their high efficiency and best-in-class performance.

The innovative technology features an oxide-filled trench design, which enables very low conduction losses and low gate charge, resulting in highly efficient switching performance.

The STripFET F8 series significantly reduces the $R_{DS(on)} \times \text{area}$, allowing their deployment in smaller packages for more compact solution designs, or larger packages capable of handling high currents and power.

The PowerFLAT 5x6 package is an especially effective package for this series, offering efficient heat and power management in a reduced footprint. Our wettable flank variant of this package ensures the necessary reliability and quality for automotive applications.

For high-power and high-current applications, our recent PowerLeaded 8x8 package offers a viable alternative to the H²PAK, with a 60% reduction in footprint and thickness, while maintaining high thermal performance and reliability.

All of our automotive products exceed AEC-Q101 requirements to help engineers design with confidence, even when dealing with particularly demanding or special mission profiles.



FIND OUT MORE

STPOWER N-channel MOSFETs > 30 V to 200 V - Products



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