

<u>Features</u>	<u>Benefits</u>	<u>Impact</u>
Lowering switching losses at higher frequency	Minimizes energy lost as heat during a high-frequency switch	Increases overall system efficiency and performance
Better heat dissipation	Reduces heat generation at given power levels	Enhances device longevity and reliability
Improved conduction losses from lower $R_{DS(on)}$	Reduces resistance during on-state, lowering conduction power loss	Improves power efficiency and system performance
Smaller, higher power density packages	Supports trends towards more compact electronic designs	Allows for smaller and more efficient device layouts
AEC-qualified 40-80 V T10 MOSFETs	Meets stringent automotive standards	Suitable for automotive applications, ensuring reliability and safety
30%-40% R_{sp} reduction vs. previous generation	Increases power density by reducing specific resistance	Enables more power in a smaller package, beneficial for high-power applications
2X reduction in Q_g , Q_{sw} , and Q_{oss}	Reduces switching losses, enhancing efficiency	Lowers energy consumption and improves efficiency and thermal management
Softer recovery diode and lower Q_{rr}	Decreases ringing, overshoot, and EMI/noise	Improves signal integrity and reduces interference
10% higher UIS capability	Allows higher current under specified conditions	Boosts reliability and robustness under stress