



SiSS22LDN TrenchFET® GEN IV POWER MOSFET

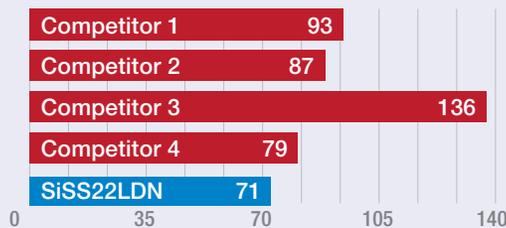
$V_{DS} = 60\text{ V}$ in PowerPAK® 1212-8S

$R_{DS(on)}$ AT $V_{GS} = 4.5\text{ V}$ (TYPICAL)



- The lowest $R_{DS(on)}$ in its class
- Typical $R_{DS(on)}$ at 4.5 V = 4.1 mΩ
- Typical $R_{DS(on)}$ at 10 V = 2.91 mΩ
- Reduces conduction loss and increases power density

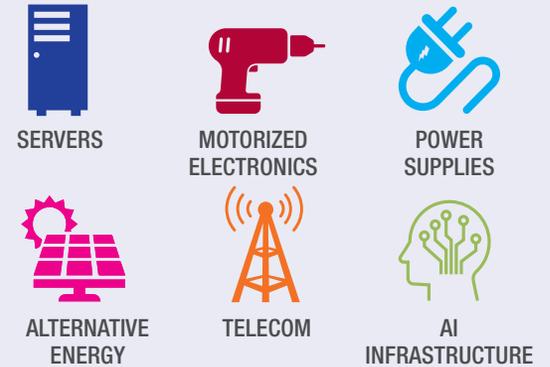
$R_{DS(on)}-Q_g$ FOM (mΩ) AT 4.5 V



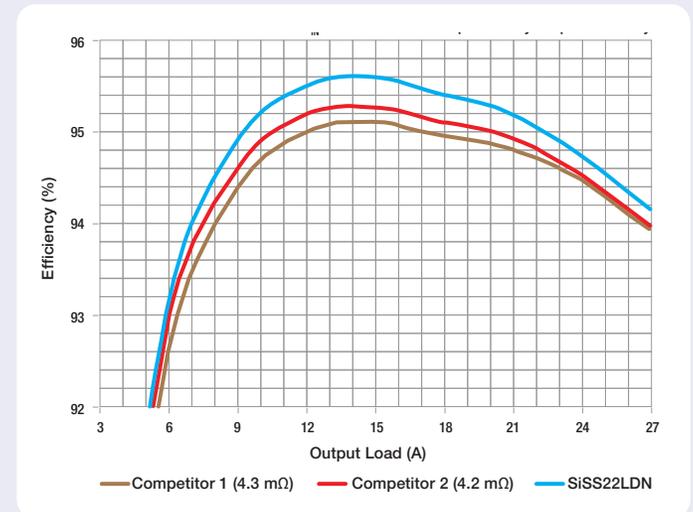
- Excellent $R_{DS(on)}-Q_{oss}$ FOM is optimized for synchronous rectification
- $R_{DS(on)}-Q_g$ FOM for V_{GS} of 4.5 V is 10 % lower than the next best product
- Very low Q_{oss} cut unplanned power loss during diode conduction



TARGET APPLICATIONS



SiSS22LDN AND HIGH PERFORMANCE COMPETITORS: EFFICIENCY vs. LOAD



ENABLES HIGHER EFFICIENCY

- Achieves higher efficiency
- Drop-in upgrade and conventional package type
- Efficiency comparison (right) shows SiSS22LDN and competitor test results on 1/8 brick with $V_{IN} = 48\text{ V}$, $V_{OUT} = 3.3\text{ V}$, $F_{sw} = 140\text{ kHz}$, and using four devices for secondary side synchronous rectification