

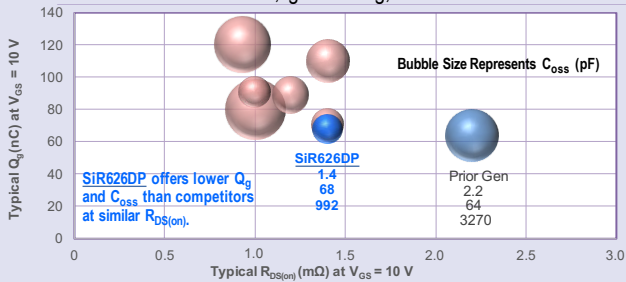


SiR626DP 60 V 1.7 mΩ N-CHANNEL MOSFET

IN PowerPAK® S0-8

OPTIMIZED FOR SYNCHRONOUS RECTIFICATION AND SWITCHING

Optimized balance of $R_{DS(on)}$, Q_g , and C_{oss} reduces power losses from MOSFET conduction, gate driving, and diode conduction



TARGET APPLICATION MARKETS



SERVERS



MOTORIZED ELECTRONICS



POWER SUPPLIES



ALTERNATIVE ENERGY



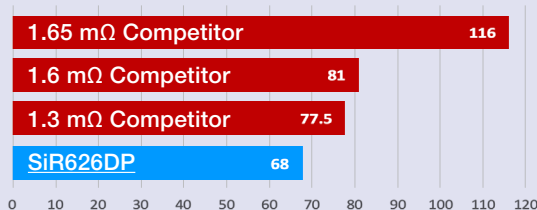
TELECOM



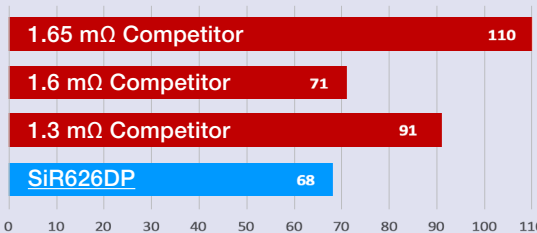
AI INFRASTRUCTURE

IMPROVED CRITICAL DYNAMIC PARAMETERS

4 % LOWER Q_g



16 % BETTER Q_{oss}



Comparisons are with similar 60 V devices

TARGET CIRCUIT APPLICATIONS

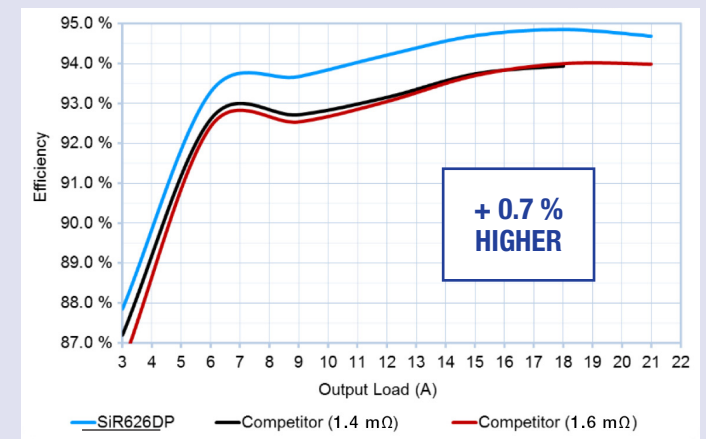
- Synchronous rectification
- Battery management
- DC/DC topologies
- Motor drive control
- Primary side
- OR-ing
- Battery protection

DESIGN RESOURCES

SPICE
Models

R-C Thermal
Models

SiR626DP ENABLES 0.7 % HIGHER EFFICIENCY FOR SYNCHRONOUS RECTIFICATION



$V_{IN} = 48$ V, $V_{OUT} = 4.3$ V, frequency = 250 kHz, ¼ brick with half-bridge technology