

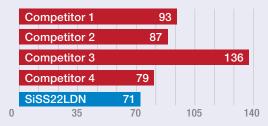
SiSS22LDN TrenchFET[®] GEN IV POWER MOSFET $V_{\text{DS}} = 60 \text{ V}$ in PowerPAK[®] 1212-8S

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

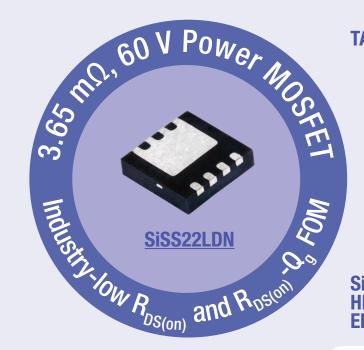
Сс	ompetito	or 1			6.2 r	nΩ
Сс	ompetito	or 2			6.2 r	mΩ
Сс	ompetito	or 3		4.7 m Ω		
Сс	Competitor 4		4.4 mΩ			
Si	SiSS22LDN			4.1 m Ω		
0.0	1.0	2.0	2.0	1.0	5.0	6 (

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

$\mathbf{R}_{\mathrm{DS(on)}}$ - \mathbf{Q}_{g} FOM (m Ω) AT 4.5 V



- Excellent R_{DS}-Q_{oss} FOM is optimized for synchronous rectification
- R_{ps} - Q_{q} FOM for V_{gs} of 4.5 V is 10 % lower than the next best product
- Very low Q_{eee} cut unplanned power loss during diode conduction



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 $V_{IN} = 48 \text{ V}, V_{OUT} = 3.3 \text{ V},$ $F_{sw} = 140$ kHz, and using four devices for secondary side synchronous rectification

TARGET APPLICATIONS





ELECTRONICS (((🝙))

MOTORIZED

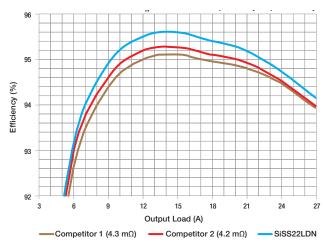


ALTERNATIVE

TELECOM ENERGY

INFRASTRUCTURE

SISS22LDN AND HIGH PERFORMANCE COMPETITORS: **EFFICIENCY** vs. LOAD



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