

FEATURED PRODUCT

Good-Ark Semiconductor GSGTL1R510

100V, 300A, 1.2mΩ SGT MOSFETs In TOLL Package

Good-Ark Semiconductor introduces GSGTL1R510, a 100V, 300A, 1.2mΩ SGT MOSFET in the TOLL package. Utilizing Good-Ark Semiconductor's leading split gate trench technology (SGT) and advanced assembly capability, GSGTL1R510 offers extremely low $R_{DS(ON)}$ of 1.2mΩ, which reduces the numbers of MOSFETs in parallel achieving cost saving while increasing system reliability. Compared to the traditional TO-263 (D²PAK), the TOLL package is 50% lower in profile and 30% smaller in footprint yet with a significantly improved power density and outstanding EMI performance. The large bottom heat sink design allows the thermal to dissipate to the copper pad on the PCB which enables high current handling capability and a much larger solder contact to avoid electro-migration at high current levels.

FEATURES

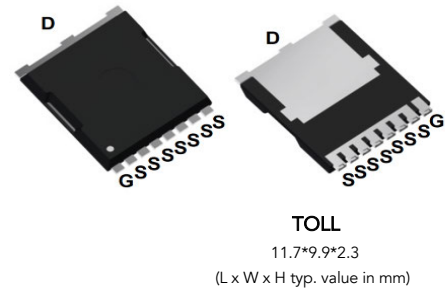
- Best-in-class on-resistance (Typical 1.2mΩ, Maximum 1.5mΩ)
- High current capability up to 300A
- Low thermal resistance
- Outstanding EMI performance

BENEFITS

- Smaller footprint, lower profile and higher power density
- Reduces the number of MOSFETs in parallel
- Increases system reliability while achieving cost-saving

APPLICATIONS

- BMS and Micro-inverters
- Brush-less DC-drives
- Energy Storage
- Battery management and safety switch



Free samples available for immediate testing.
Contact us at: (+1) 631-319-1858 or
inquiry@goodarksemi.com

KEY SPECIFICATIONS

Part Number	I _D	V _{DS}	V _{GS}	V _{GS (TH)} @V _{DS} =V _{GS} , I _D =250uA		R _{DS(ON)} @I _D = 30A V _{GS} =10V		Q _{GD} @V _{DD} =50V, I _D =100A V _{GS} =10V	Q _G @V _{DD} =50V, I _D =100A, V _{GS} =10V	C _{iss}	T _J , T _{STG}
				Min (V)	Max (V)	Typ. (mΩ)	Max (mΩ)	Typ. (nC)	Typ. (nC)		
GSGTL1R510	300	100	±20	2	4	1.2	1.5	48	176	10800	-55 to +150

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