Product Overview

NTMFS08N003C: N-Channel Shielded Gate PowerTrench® MOSFET 80V, 147A, 3.1mΩ

For complete documentation, see the data sheet.

This N-Channel MV MOSFET is produced using ON Semiconductor's advanced PowerTrench process that incorporates Shielded Gate technology. This process has been optimized to minimize on-state resistance and yet maintain superior switching performance with best in class soft body diode.

Features

- Shielded Gate MOSFET Technology
- Max $r_{DS(on)}$ = 3.1 mΩ at V_{GS} = 10 V, I_D = 56A
- Max $r_{DS(on)}$ = 8.1 mΩ at V_{GS} = 6 V, I_D = 28 A
- 50% Lower Q_{rr} than Other MOSFET Suppliers
- Lowers Switching Noise/EMI
- MSL1 Robust Package Design
- 100% UIL Tested
- RoHS Compliant

Applications

- Primary DC−DC MOSFET
- Synchronous Rectifier in DC−DC and AC−DC
- Motor Drives
- Solar Inverters
- Load switches

End Products

- Power adaptors
- DC to DC power supplies
- Power Tools
- Drones
- Battery packs

Part Electrical Specifications

Product	Compliance	Status	Channel Polarity	Configuration	$V_{(BR)DSS}$ Min (V)	V_{GS} Max (V)	$V_{GS(th)}$ Max (V)	I_D Max (A)	P_D Max (W)	$R_{DS(on)}$ Max @ V_{GS} = 2.5 V (mΩ)	$R_{DS(on)}$ Max @ V_{GS} = 4.5 V (mΩ)	$R_{DS(on)}$ Max @ V_{GS} = 10 V (mΩ)	Q_g Typ @ V_{GS} = 4.5 V (nC)	Q_g Typ @ V_{GS} = 10 V (nC)	C_{iss} Typ (pF)	Package Type
NTMFS08N003C	Pb-free Halide free	Active	N-Channel	Single	80	±20	4	147	147			3.1		52	3820	PQFN-8

For more information please contact your local sales support at www.onsemi.com.

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