Product Overview

FDP2D3N10C: N-Channel PowerTrench® MOSFET, Shielded Gate, 100V, 222A, 2.3mΩ

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

- Max RDS(on) = 2.3 mΩ at VGS = 10 V, ID = 222 A
- High Performance Trench Technology for Extremely Low RDS(on)
- Extremely Low Reverse Recovery Charge, Qrr
- Low Gate Charge, QG = 108nC (Typ.)
- High Power and Current Handling Capability
- 100% UIL Tested
- RoHS Compliant

Benefits

- Power Density & Shielded Gate
- High power density with Shielded gate technology
- Low Vds spike internal snubber function.
- Low switching loss
- Low Qrr/Trr
- Soft recovery performance
- Good EMI performance

Applications

- Synchronous Rectification for ATX / Server / Workstation / Telecom PSU / Adapter and Industrial Power Supplies.
- Motor drives and Uninterruptible Power Supplies
- Micro Solar Inverter

End Products

- Server
- Telecom
- Computing (ATX, Workstation, Adapter, Industrial Power Supplies etc.)
- Motor Drive
- Uninterruptible Power Supplies

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
FDP2D3N10C	Pb-free Halide free	Active	N-Channel	Single	100	4	4	222	214	-	-	2.3	-	108	7980	TO-220-3

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

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