

## Product Overview

### FDD86250\_F085: N-Channel Shielded Gate PowerTrench® MOSFET 15 V, 50 A, 22 mΩ

For complete documentation, see the data sheet.

N-Channel Shielded Gate PowerTrench® MOSFET 150 V, 50 A, 22 mΩ

### Features

- Typical  $R_{DS(on)}$  = 19.4 mΩ at  $V_{GS} = 10V$ ,  $I_D = 20 A$
- Typical  $Q_{g(tot)}$  = 28 nC at  $V_{GS} = 10V$ ,  $I_D = 40 A$
- UIS Capability
- RoHS Compliant
- Qualified to AEC Q101

### Applications

- Automotive Engine Control
- PowerTrain Management
- Solenoid and Motor Drivers
- Distributed Power Architectures and VRM
- Primary Switch for 12V Systems

### End Products

- Integrated Starter/Alternator

### Part Electrical Specifications

Product	Compliance	Status	Chan- nel Polar- ity	Confi- gura- tion	$V_{BRD}$ $V_{SS}$ 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)	Pack- age Type
FDD86250-F085	AEC Qualified PPAP Capable Pb-free Halide free	Active	N- Chan- nel	Singl- e	150	±20	4	50	160	-	-	22	-	28	1900	DPA K-3 / TO- 252-3

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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