

Product Overview

FDMS86181: N-Channel Shielded Gate PowerTrench® MOSFET 100V, 124A, 4.2mΩ

For complete documentation, see the data sheet.

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

Features

- Shielded Gate MOSFET Technology
- Max $r_{DS(on)}$ = 4.2 mΩ at $V_{GS} = 10\text{ V}$, $I_D = 44\text{ A}$
- Max $r_{DS(on)}$ = 12 mΩ at $V_{GS} = 6\text{ V}$, $I_D = 22\text{ A}$
- ADD
- 50% lower Q_{rr} than other MOSFET suppliers
- Lowers switching noise/EMI
- MSL1 robust package design
- 100% UIL tested
- RoHS Compliant

Applications

- This product is general usage and suitable for many different applications.

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Channel Polarity	Configuration	$V_{(BR)DS}$ Min (V)	V_{GS} Max (V)	$V_{GS(th)}$ Max (V)	I_D Max (A)	P_D Max (W)	$R_{DS(on)}$ Max @ $V_{GS} = 2.5\text{ V}$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 4.5\text{ V}$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 10\text{ V}$ (mΩ)	Q_g Typ @ $V_{GS} = 4.5\text{ V}$ (nC)	Q_g Typ @ $V_{GS} = 10\text{ V}$ (nC)	C_{iss} Typ (pF)	Package Type
FDMS86181	1.3044	Pb-free Halide free	Active	N-Channel	Single	100	±20	4	124	125	-	-	4.2	-	27	2945	PQFN-8

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

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