

Product Overview

FDMS0312AS: N-Channel PowerTrench® SyncFET™ 30V, 22A, 5.0mΩ

For complete documentation, see the data sheet.

The FDMS0312AS has been designed to minimize losses in power conversion application. Advancements in both silicon and package technologies have been combined to offer the lowest $r_{DS(on)}$ while maintaining excellent switching performance. This device has the added benefit of an efficient monolithic Schottky body diode.

Features

- Max $r_{DS(on)}$ = 5.0 mΩ at $V_{GS} = 10$ V, $I_D = 18$ A
- Max $r_{DS(on)}$ = 6.2 mΩ at $V_{GS} = 4.5$ V, $I_D = 16$ A
- Advanced Package and Silicon combination for low $r_{DS(on)}$ and high efficiency
- SyncFET Schottky Body Diode
- MSL1 robust package design
- 100% UIL tested
- RoHS Compliant

Applications

- Notebook PC

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Channel Polarity	Configuration	$V_{DS}^{(BR)}$ Min (V)	V_{GS}^{Max} (V)	$V_{GS}^{(th)}$ Max (V)	I_D^{Max} (A)	P_D^{Max} (W)	$R_{DS(on)}^{n)}$ Max @ $V_{GS} = 2.5$ V (mΩ)	$R_{DS(on)}^{n)}$ Max @ $V_{GS} = 4.5$ V (mΩ)	$R_{DS(on)}^{n)}$ Max @ $V_{GS} = 10$ V (mΩ)	Q_3^{Typ} @ $V_{GS} = 4.5$ V (nC)	Q_3^{Typ} @ $V_{GS} = 10$ V (nC)	C_{iss}^{Typ} (pF)	Package Type
FDMS0312AS	0.1879	Pb-free Halide free non AEC-Q and PPAP	Active	N-Channel	Single	30	20	3	22	36	-	6.2	5	-	11	1365	PQFN-8

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

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