

Product Overview

FCH067N65S3: N-Channel SuperFET® III MOSFET 650 V, 44 A, 67 mΩ , TO-247

For complete documentation, see the data sheet.

SuperFET® III MOSFET is Fairchild Semiconductor's brandnew high voltage super-junction (SJ) MOSFET family that is utilizing charge balance technology for outstanding low on-resistance and lower gate charge performance. This advanced technology is tailored to minimize conduction loss, provide superior switching performance, and withstand extreme dv/dt rate. Consequently, SuperFET III MOSFET is very suitable for various power system for miniaturization and higher efficiency

Features

- 700 V @ $T_J = 150\text{ }^\circ\text{C}$
- Low Effective Output Capacitance (Typ. $C_{oss(eff.)} = 715\text{ pF}$)
- Ultra Low Gate Charge (Typ. $Q_g = 78\text{ nC}$)
- Typ. $R_{DS(on)} = 59\text{ m}\Omega$
- 100% Avalanche Tested
- RoHS Compliant
- Optimized Capacitance

Applications

- Computing
- Telecommunication

Benefits

- Higher system reliability at low temperature operation
- Lower switching loss
- Lower switching loss

End Products

- Server / Telecom
- Solar inverter / UPS
- EVC

Part Electrical Specifications

Product	Compliance	Status	Chan- nel Polar- ity	Confi- gura- tion	$V_{(BR)D}$ 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
FCH067N65S3-F155	Pb-free	Active	N- Chan- nel		650	±30	4.5	44	312	-	-	67	-	78	3090	TO- 247-3

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

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