

製品概要

NTHL040N65S3F: Power MOSFET, N-Channel, SUPERFET® III, FRFET®, 650 V, 65 A, 40 mΩ, TO-247

技術情報は、データシートをご参照ください。

SUPERFET III MOSFET is ON Semiconductor's brand-new 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 the various power systems for miniaturization and higher efficiency. SUPERFET III FRFET MOSFET's optimized reverse recovery performance of body diode can remove additional component and improve system reliability.

特長

- 700 V @ $T_J = 150\text{ }^{\circ}\text{C}$
- Ultra Low Gate Charge (Typ. $Q_g = 158\text{ nC}$)
- Low Effective Output Capacitance (Typ. $C_{oss}(\text{eff.}) = 1366\text{ pF}$)
- Excellent body diode performance (low Q_{rr} , robust body diode)
- Optimized Capacitance
- RoHS Compliant
- 100% Avalanche Tested
- Typ. $R_{DS}(\text{on}) = 32\text{ m}\Omega$

アプリケーション

- Telecommunication
- Cloud system
- Industrial

利点

- Higher system reliability at low temperature operation
- Lower switching loss
- Lower switching loss
- Higher system reliability in LLC and Phase shift full bridge circuit
- Lower peak V_{ds} and lower V_{gs} oscillation

最終製品

- Telecom power
- Server power
- EV charger
- Solar / UPS

電氣的仕様

製品	Pricing (\$/Unit)	Compliance	Status	Channel Polarity	Configuration	$V_{DS}(\text{BR})$ Min (V)	V_{GS} Max (V)	$V_{GS}(\text{th})$ Max (V)	I_D Max (A)	P_D Max (W)	$R_{DS(\text{on})}$ Max @ $V_{GS} = 2.5\text{ V}$ (mΩ)	$R_{DS(\text{on})}$ Max @ $V_{GS} = 4.5\text{ V}$ (mΩ)	$R_{DS(\text{on})}$ 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
NTHL040N65S3F	4.7952	Pb-free	Active	N-Channel	Single	650	30	5	65	446	-	-	40	-	158	5940	TO-247-3

詳細は、弊社 www.onsemi.jp の営業または販売代理店にお問い合わせください。

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