

Product Overview

NTHL080N120SC1: N-Channel Silicon Carbide MOSFET 1200 V, 80 mΩ, TO247-3L

For complete documentation, see the data sheet.

Silicon Carbide (SiC) MOSFET uses a completely new technology that provide superior switching performance and higher reliability compared to Silicon. In addition, the low ON resistance and compact chip size ensure low capacitance and gate charge. Consequently, system benefits include highest efficiency, faster operation frequency, increased power density, reduced EMI, and reduced system size.

Features

- 1200V rated
- Max $R_{DS(on)} = 110\text{m}\Omega$ at $V_{GS} = 20\text{V}$, $I_D = 20\text{A}$
- High Speed Switching and Low Capacitance
- 100% UIL Tested

Applications

- PFC
- Boost Inverter
- PV Charging

End Products

- Solar Inverter
- Network Power Supply
- Server Power Supply

Part Electrical Specifications

Product	Compliance	Status	Channel Polarity	Configuration	$V_{GS}^{(BR)D}$ Min (V)	V_{GS} Max (V)	$V_{GS(th)}$ Max (V)	I_D Max (A)	P_D Max (W)	$R_{DS(on)}$ Max @ $V_{GS} = 2.5\text{V}$ ($\text{m}\Omega$)	$R_{DS(on)}$ Max @ $V_{GS} = 4.5\text{V}$ ($\text{m}\Omega$)	$R_{DS(on)}$ Max @ $V_{GS} = 10\text{V}$ ($\text{m}\Omega$)	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
NTHL080N120SC1	Pb-free Halide free	NEW	N-Channel	Single	1200	25	4.3	44	348						1112	TO-247-3LD

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

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