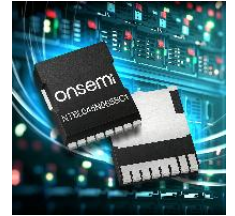


NTBL045N065SC1

Silicon Carbide (SiC) MOSFET - 33 mohm, 650 V, M2, TOLL



Product Overview

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. The TOLL package offers improved thermal performance and excellent switching performance thanks to Kelvin Source configuration and lower parasitic source inductance. TOLL offers Moisture Sensitivity Level 1 (MSL 1).

Features

- High Junction Temperature ($T_j = 175^\circ\text{C}$)
- Leadless thin SMD package
- Kelvin Source Configuratio
- Ultra Low Gate Charge ($Q_g(\text{tot}) = 105 \text{ nC}$)
- Low Effective Output Capacitance ($C_{oss} = 162 \text{ pF}$)
- Zero reverse recovery current of body diode
- Typ. $R_{DS(\text{on})} = 33 \text{ m}\Omega$ @ $V_{gs} : 18\text{V}$
- 650V rated
- 100% Avalanche Tested
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

For more features, see the data sheet

Benefits

- Higher system reliability
- High power density
- Low gate noise and switching loss
- Low switching loss
- Low switching loss
- Higher system reliability in LLC and Phase shift full bridge circuit
- Low conduction loss

Applications

- Telecommunication
- Cloud system
- Industrial

End Products

- Telecom power
- Server power
- UPS / ESS
- Solar

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Family	Blocking Voltage BV_{DSS} (V)	$I_{D(\text{max})}$ (A)	$R_{DS(\text{on})}$ Typ @ 25°C (m Ω)	Q_g Total (nC)	Output Capacitance (pF)	T_j Max ($^\circ\text{C}$)	Package Type
NTBL045N065SC1	7.3332		NEW	M2	650	73	33	105	162	175	H-PSOF8L 9.90x11.68, 1.20P