

NVHL060N090SC1

Silicon Carbide MOSFET, N-Channel, 900 V, 60 mΩ, TO247-3L

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.

Features

- Typical RDSon
- High Speed Switching and Low Capacitance
- 100% UIL Tested
- Qualified for Automotive According to AEC-Q101
- Devices are Pb-Free and are RoHS Compliant

Benefits

- 60 mΩ
- Coss = 113pF

Applications

- PFC
- OBC

End Products

- Automotive DC/DC converter for EV/PHEV
- Automotive On Board Charger
- Automotive Auxiliary Motor Drive

Part Electrical Specifications

| Product | Pricing (\$/Unit) | Compliance | Status | Family | Blocking Voltage BV _{DSS} (V) | I _{D(max)} (A) | R _{DS(on)} Typ @ 25°C (mΩ) | Q _g Total (nC) | Output Capacitance (pF) | T _j Max (°C) | Package Type |
|----------------|-------------------|------------|--------|--------|--|-------------------------|-------------------------------------|---------------------------|-------------------------|-------------------------|--------------|
| NVHL060N090SC1 | 5.6679 | | Active | M2 | 900 | 46 | 60 | 87 | 113 | 175 | TO-247-3LD |