

# NVC020N120SC1

## Silicon Carbide MOSFET, N-Channel, 1200 V, 20 mΩ, Bare Die

### 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

- 1200 V
- High Speed Switching with Low Capacitance
- 100% UIL Tested
- Qualified for Automotive According to AEC-Q101

#### Applications

- On Board Charger (OBC)
- DC DC Inverter

#### Benefits

- T<sub>J</sub>= 175°C

#### End Products

- Automotive EV/HEV

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Family	Blocking Voltage BV <sub>DSS</sub> (V)	I <sub>D(max)</sub> (A)	R <sub>DS(on) Typ @ 25°C (mΩ)</sub>	Q <sub>g Total</sub> (nC)	Output Capacitance (pF)	T <sub>j Max</sub> (°C)	Package Type
NVC020N120SC1			Active	M1	1200	160	20	168	297	175	