

## Product Overview

### NVBG020N120SC1: Silicon Carbide MOSFET, N-Channel, 1200 V, 20 mΩ , D2PAK-7L

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

- Qualified for Automotive According to AEC-Q101
- 1200V rated
- Max RDS(on) = 28 mΩ at Vgs = 20V, Id = 60A
- High Speed Switching and Low Capacitance
- 100% UIL Tested
- Devices are RoHS Compliant

#### Applications

- High power DCDC
- Inverter

#### Benefits

- Automotive Grade

#### End Products

- Automotive DC/DC converter for EV/PHEV
- Automotive Inverters

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Channel Polarity	Configuration	Blocking Voltage BV <sub>DSS</sub> (V)	I <sub>D(max)</sub> (A)	R <sub>DS(on)</sub> Typ @ 25°C (mΩ)	Q <sub>g</sub> Total (C)	Output Capacitance (C)	T <sub>j</sub> Max (°C)	Package Type
NVBG020N120SC1	21.6661	AEC Qualified PPAP Capable Pb-free Halide free	Active	N-Channel	Single	1200	98	20	220	258	175	D2PAK7 (TO-263-7L HV)

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