

NTHL022N120M3S

Silicon Carbide (SiC) MOSFET – EliteSiC, 22 mohm, 1200 V, M3S, TO-247-3L

Product Overview

For complete documentation, see the data sheet.

The new family of 1200V M3S planar SiC MOSFETs is optimized for fast switching applications. Planar technology works reliably with negative gate voltage drive and turn off spikes on the gate. This family has optimum performance when driven with 18V gate drive but also works well with 15V gate drive.

Features

- Excellent FOM [ = Rdson \* Eoss ]
- Ultra Low Gate Charge (QG(tot) = 139 nC)
- High Speed Switching with Low Capacitance (Coss = 141 pF)
- 15V to 18V Gate Drive
- New M3S technology: 22 mohm RDS(ON) with low Eon and Eoff losses
- 100% Avalanche Tested
- Halide Free and RoHS Compliant



Applications

- Industrial

End Products

- UPS / ESS
- Solar
- EV Charger

Part Electrical Specifications

Product	Status	Compliance	Famil y	Block ing Volta ge BV <sub>DS</sub> (V)	I <sub>D</sub> (max) (A)	R <sub>DS(on)</sub> Typ ) @ 25°C (mΩ)	Q <sub>g</sub> Total (nC)	Outp ut Capa citan ce (pF)	T <sub>j</sub> Max (°C)	Pack age Type	Case Outli ne	MSL Type	MSL Tem p (°C)	Cont ainer Type	Cont ainer Qty.
NTHL022N120 M3S	Active	 	M3S	1200	88	22	139	141	175	TO- 247- 3LD	340 CX.P DF	NA	0	TUB E	450