

NTH4L023N065M3S

Silicon Carbide (SiC) MOSFET – EliteSiC, 23 mohm, 650 V, M3S, TO-247-4L

Product Overview

For complete documentation, see the data sheet.

The new family of 650V 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

- TO-247-4L Package with Kelvin source configuration
- Excellent FOM [= $R_{DS(on)} * E_{oss}$]
- Ultra Low Gate Charge ($Q_{G(tot)} = 69 \text{ nC}$)
- High Speed Switching with Low Capacitance ($C_{oss} = 153 \text{ pF}$)
- 15V to 18V Gate Drive
- New M3S technology: 23 mohm RDS(ON) with low Eon and Eoff losses
- 100% Avalanche Tested
- Halide Free and RoHS Compliant

Applications

- Industrial
- Cloud system

End Products

- UPS / ESS
- Solar
- EV Charger
- AI Data center

Part Electrical Specifications

Product	Status	Compliance	Family	Blocking Voltage BV_{DS} (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	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
NTH4L023N065M3S	Active, New	 	M3S	650	40	23	69	153	175	TO-247-4	340 CJP DF	NA	0	TUBE	450