

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

NTH4L023N065M3S

Features

- Typical $R_{DS(on)} = 23\text{ m}\Omega$ @ $V_{GS} = 18\text{ V}$
- Ultra Low Gate Charge ($Q_{G(tot)} = 69\text{ nC}$)
- High Speed Switching with Low Capacitance ($C_{oss} = 153\text{ pF}$)
- 100% Avalanche Tested
- This Device is Halide Free and RoHS Compliant with Exemption 7a, Pb-Free 2LI (on second level interconnection)

Applications

- SMPS, Solar Inverters, UPS, Energy Storages, EV Charging Infrastructure

MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
--			

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THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
--	θ		°
--	θ		

RECOMMENDED OPERATING CONDITIONS

Parameter	Symbol	Value	Unit
--		--	

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

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ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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SWITCHING CHARACTERISTICS

-		-	-		-		
-			Ω	-			-
			-		-		
			-		-		
-			-		-	μ	
-			-		-		
			-		-		

SOURCE TO DRAIN DIODE CHARACTERISTICS

		-	-			
		-	-		-	
		-	-		-	
		μ	-		-	
			-		-	

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TYPICAL CHARACTERISTICS

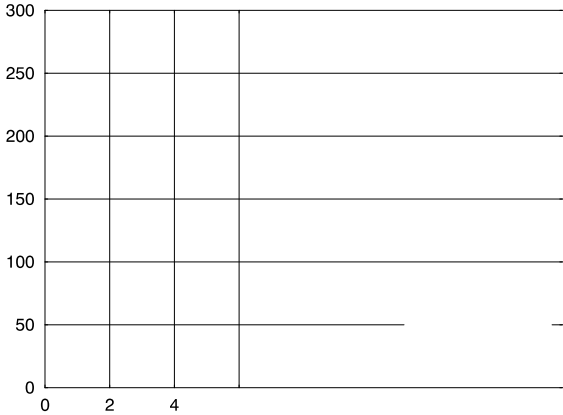


Figure 1. Output Characteristics

Figure 2. Output Characteristics

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TYPICAL CHARACTERISTICS

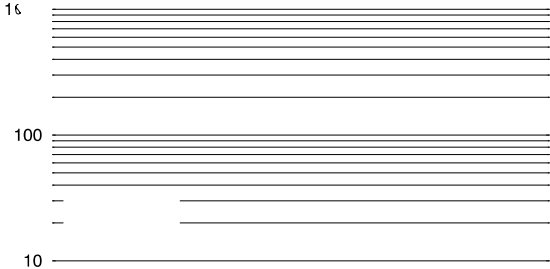


Figure 7. Capacitance Characteristics

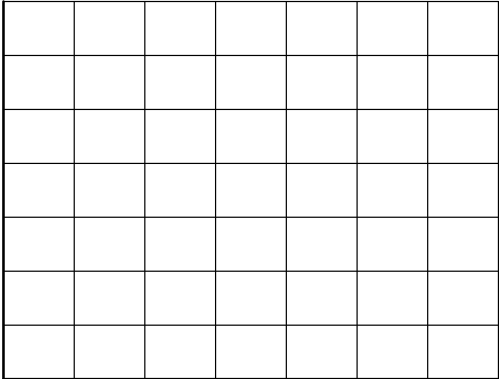


Figure 8. Stored Energy vs Drain to Source Voltage

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TO-247-4LD
CASE 340CJ
ISSUE A

DATE 16 SEP 2019

A E A B
A2 E1 \emptyset p1
D2

E/2 Q

D D1

\emptyset

L1

b2 A1

b1 (3X) L

1 4

e1 b(4X) c

e 2X

\oplus 0.254 (M) B A (M)

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