



**NTH4L013N120M3S**

# NTH4L013N120M3S

## ELECTRICAL CHARACTERISTICS ( $T_J = 25^\circ\text{C}$ unless otherwise specified) (continued)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
<b>SOURCE-DRAIN DIODE CHARACTERISTICS</b>						
Continuous Source-Drain Diode Forward Current	$I_{SD}$	$V_{GS} = -3\text{ V}, T_C = 25^\circ\text{C}$ (Note 6)	-	-	151	A
Pulsed Source-Drain Diode Forward Current (Note 2)	$I_{SDM}$		-	-	505	
Forward Diode Voltage	$V_{SD}$	$V_{GS} = -3\text{ V}, I_{SD} = 75\text{ A}, T_J = 25^\circ\text{C}$	-	4.7	-	V
Reverse Recovery Time	$t_{RR}$	$V_{GS} = -3/18\text{ V}, I_{SD} = 75\text{ A},$ $di_S/dt = 1000\text{ A}/\mu\text{s}, V_{DS} = 800\text{ V}$ (Note 6)	-	29	-	ns
Reverse Recovery Charge	$Q_{RR}$		-	252	-	nC
Reverse Recovery Energy	$E_{REC}$		-	26	-	$\mu\text{J}$
Peak Reverse Recovery Current	$I_{RRM}$		-	18	-	A
Charge Time	$T_A$		-	17	-	ns
Discharge Time	$T_B$		-	12	-	ns

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

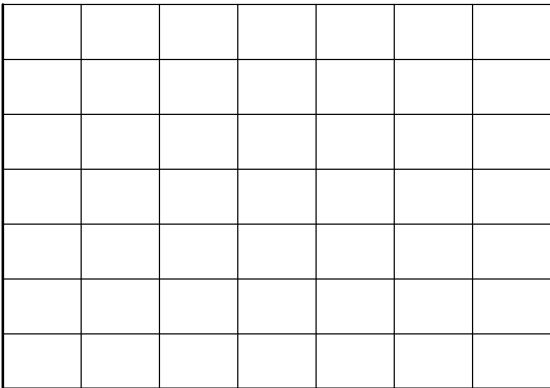
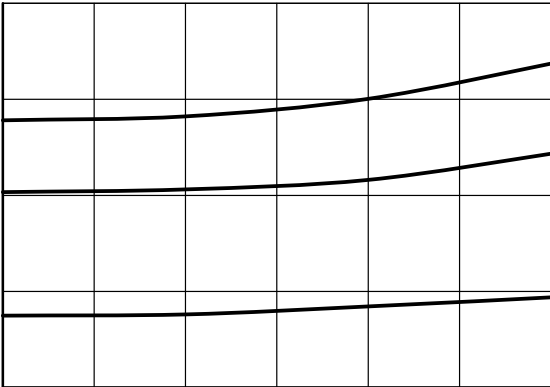
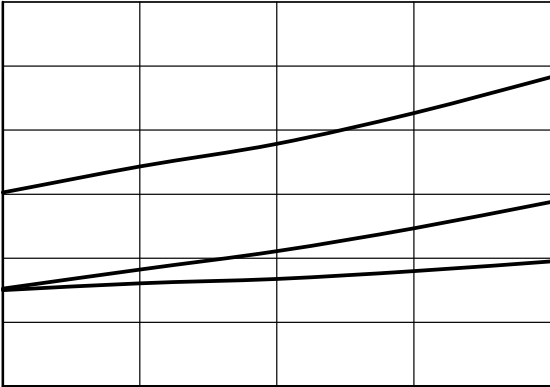
5.  $E_{ON}/E_{OFF}$  result is with body diode.

6. Defined by design, not subject to production test.



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TYPICAL CHARACTERISTICS



**NTH4L013N120M3S**

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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