

Features

Ω

Applications

**MAXIMUM RATINGS** (T<sub>J</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-to-Source Voltage	V <sub>DSS</sub>	650	V
Gate-to-Source Voltage	V <sub>GS</sub>	-8/+22	V
Continuous Drain Current	T <sub>C</sub> = 25°C	I <sub>D</sub>	50 A
Power Dissipation		P <sub>D</sub>	187 W
Continuous Drain Current (Note 1)	T <sub>C</sub> = 100°C	I <sub>D</sub>	30 A
Power Dissipation		P <sub>D</sub>	94 W
Pulsed Drain Current (Note 2)	T <sub>C</sub> = 25°C, t <sub>p</sub> = 100 μs	I <sub>DM</sub>	163 A
Continuous Source-Drain Current (Body Diode)	T <sub>C</sub> = 25°C, V <sub>GS</sub> = -3 V	I <sub>S</sub>	29 A
	T <sub>C</sub> = 100°C, V <sub>GS</sub> = -3 V		16
Pulsed Source-Drain Current (Body Diode) (Note 2)	T <sub>C</sub> = 25°C, V <sub>GS</sub> = -3 V, t <sub>p</sub> = 100 μs	I <sub>SM</sub>	

NTH4L032N065M3S

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
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# NTH4L032N065M3S

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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**SWITCHING CHARACTERISTICS**

Turn-On Delay Time	$t_{d(ON)}$	$V_{GS} = -3/18\text{ V}$ , $V_{DD} = 400\text{ V}$ , $I_D = 15\text{ A}$ , $R_G = 4.7\ \Omega$ , $T_J = 175^\circ\text{C}$ (Notes 5, 6)	-	7.8	-	ns
Turn-Off Delay Time	$t_{d(OFF)}$		-	37	-	
Rise Time	$t_r$		-	12	-	

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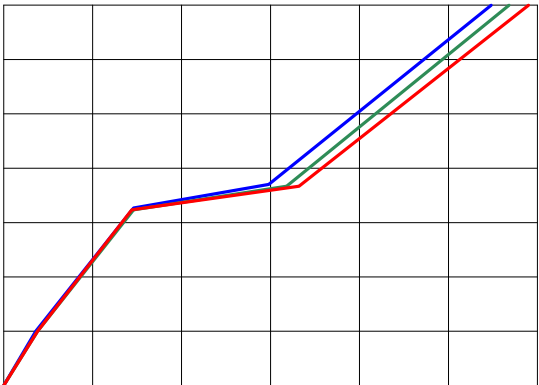
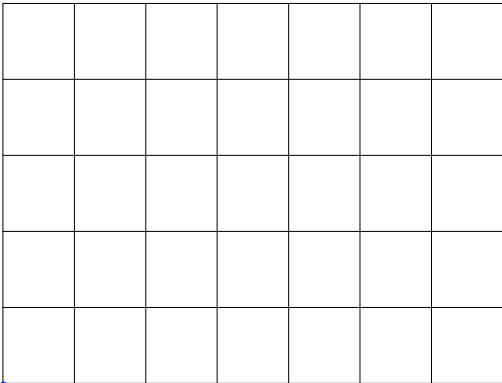
## TYPICAL CHARACTERISTICS

Figure 1. On-Region Characteristics

Figure 2. Output Characteristics

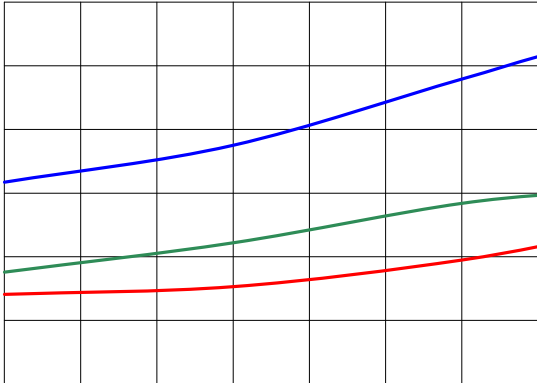
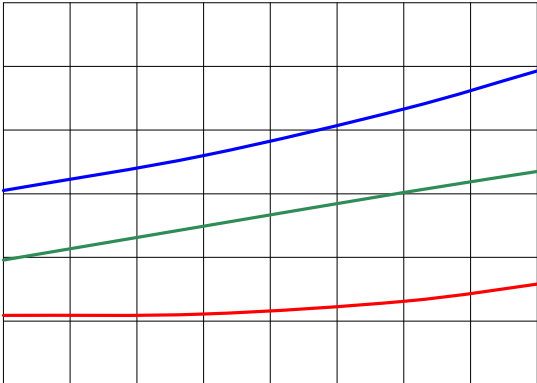
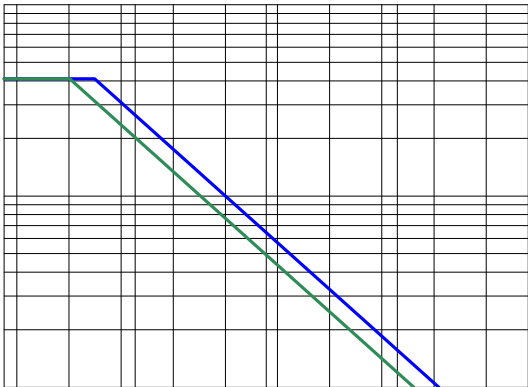
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TYPICAL CHARACTERISTICS



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TYPICAL CHARACTERISTICS









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