

NTH4L028N170M1

THERMAL CHARACTERISTICS

Parameter	Symbol	Max	Unit
Junction-to-Case – Steady State (Note 1)	$R_{\theta JC}$	0.28	$^{\circ}\text{C}/\text{W}$

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS} = 0\text{ V}, I_D = 1\text{ mA}$	1700	–	–	V	
Drain-to-Source Breakdown Voltage Temperature Coefficient	$V_{(BR)DSS}/T_J$	$I_D = 1\text{ mA}$, referenced to 25°C	–	0.46	–	$\text{V}/^{\circ}\text{C}$	
Zero Gate Voltage Drain Current	I_{DSS}	$V_{GS} = 0\text{ V}, V_{DS} = 1700\text{ V}$	$T_J = 25^{\circ}\text{C}$	–	–	100	μA
			$T_J = 175^{\circ}\text{C}$	–	–	1	mA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = +25/-15\text{ V}, V_{DS} = 0\text{ V}$	–	–	± 1	μA	

ON CHARACTERISTICS (Note 2)

Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 20\text{ mA}$	1.8	2.75	4.3	V
Recommended Gate Voltage	V_{GOP}		–5	–	+20	V
Drain-to-Source On Resistance	$R_{DS(on)}$	$V_{GS} = 20\text{ V}, I_D = 60\text{ A}, T_J = 25^{\circ}\text{C}$	–	28	40	$\text{m}\Omega$
		$V_{GS} = 20\text{ V}, I_D = 60\text{ A}, T_J = 175^{\circ}\text{C}$	–	57	–	

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TYPICAL CHARACTERISTICS

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TYPICAL CHARACTERISTICS

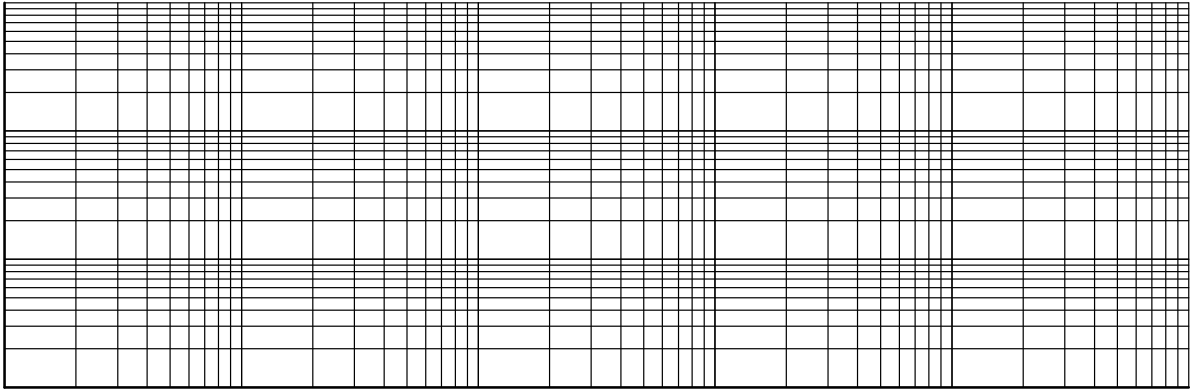


Figure 16. Junction-to-Case Thermal Response

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