

NTMT045N065SC1

THERMAL CHARACTERISTICS

Parameter	Symbol	Max	Unit
Junction-to-Case – Steady State (Note 2)	$R_{\theta JC}$	0.80	°C/W
Junction-to-Ambient – Steady State (Notes 1, 2)	$R_{\theta JA}$	45	°C/W

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS} = 0\text{ V}, I_D = 1\text{ mA}$	650	–	–	V	
Drain-to-Source Breakdown Voltage Temperature Coefficient	$V_{(BR)DSS}/T_J$	$I_D = 20\text{ mA}$, refer to 25°C	–	0.15	–	V/°C	
Zero Gate Voltage Drain Current	I_{DSS}	$V_{GS} = 0\text{ V}, V_{DS} = 650\text{ V}$	$T_J = 25^\circ\text{C}$	–	–	10	μA
			$T_J = 175^\circ\text{C}$	–	–	1	mA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = +18/-5\text{ V}, V_{DS} = 0\text{ V}$	–	–	250	nA	

ON CHARACTERISTICS

Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 8\text{ mA}$	1.8	2.8	4.3	V
Recommended Gate Voltage	V_{GOP}		–5	–		

NTMT045N065SC1

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
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NTMT045N065SC1

TYPICAL CHARACTERISTICS

Figure 1. On-Region Characteristics

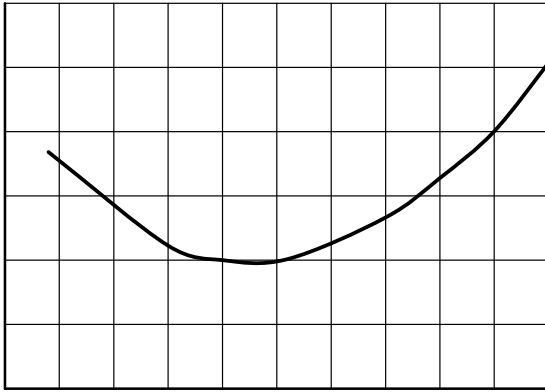
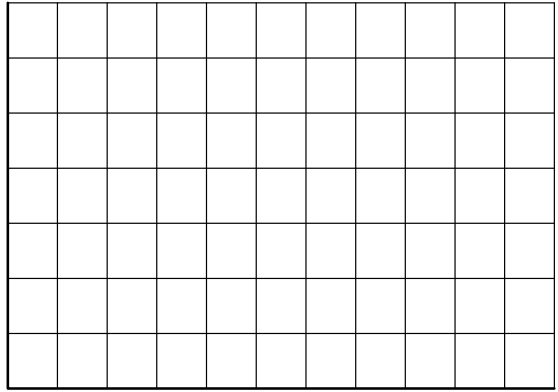


Figure 2. Normalized On-Resistance vs. Drain Current and Gate Voltage



T_J, JU9 0 cm 00 0144.31.30080149 -EMPERA

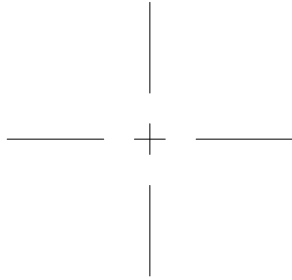
Figure 3. On-Resistance Variation with Temperature

Figure 4. On-Resistance vs. Gate-to-Source Voltage



TDFN4 8.00x8.00x1.00, 2.00P
CASE 520AB
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RECOMMENDED LAND †

**GENERIC
 MARKING DIAGRAM***



- XXXX = Specific Device Code
- A = Assembly Location
- L = Wafer Lot
- Y = Year
- W = Work Week
- = Pb-Free Package

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "▪", may or may not be present. Some products may not follow the Generic Marking.

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