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Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
OFF CHARACTERISTICS (Note 4)						
Drain-Source Breakdown Voltage	BV_{DSS}	20	—	—	V	V_{GS} = 0V, I_D = 100μA
Zero Gate Voltage Drain Current @ T_C = 25°C	I_{DSS}	—	—	500	nA	V_{DS} = 20V, V_{GS} = 0V
Gate-Body Leakage	I_{GSS}	—	—	±1 ±500 ±100	μA nA nA	V_{GS} = ±10V, V_{DS} = 0V V_{GS} = ±8V, V_{DS} = 0V V_{GS} = ±5V, V_{DS} = 0V
ON CHARACTERISTICS (Note 4)						
Gate Threshold Voltage	$V_{GS(th)}$	0.5	—	1.0	V	V_{DS} = V_{GS}, I_D = 250μA
Static Drain-Source On-Resistance	$R_{DS\ (ON)}$	— — — — —	1.8 2.4 2.9 3.7 5.4	3.0 4.0 6.0 10.0 15.0	Ω	V_{GS} = 4.5V, I_D = 100mA V_{GS} = 2.5V, I_D = 50mA V_{GS} = 1.8V, I_D = 20mA V_{GS} = 1.5V, I_D = 10mA V_{GS} = 1.2V, I_D = 1mA
Forward Transconductance	$\|Y_{fs}\|$	—	242	—	mS	V_{DS} =10V, I_D = 0.1A
Source-Drain Diode Forward Voltage	V_{SD}	0.5	—	1.0	V	V_{GS} = 0V, I_S = 115mA
DYNAMIC CHARACTERISTICS						
Input Capacitance	C_{iss}	—	14.1	—	pF	V_{DS} = 15V, V_{GS} = 0V f = 1.0MHz
Output Capacitance	C_{oss}	—	2.9	—	pF	
Reverse Transfer Capacitance	C_{rss}	—	1.6	—	pF	
SWITCHING CHARACTERISTICS, V_{GS} = 4.5V (Note 5)						
Turn-On Delay Time	$t_{d(on)}$	—	3.8	—	ns	V_{GS} = 4.5V, V_{DD} = 10V I_D = 200mA, R_G = 2.0Ω
Rise Time	t_r	—	7.9	—		
Turn-Off Delay Time	$t_{d(off)}$	—	13.4	—		
Fall Time	t_f	—	15.2	—		

Notes: 4. Short duration pulse test used to minimize self-heating effect.
5. Switching characteristics are independent of operating junction temperature.

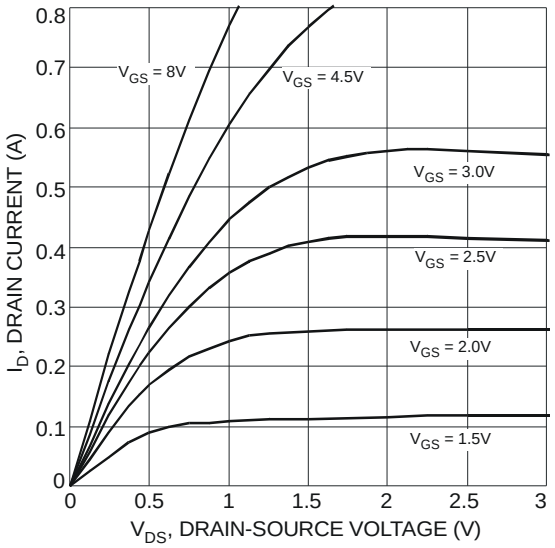

Fig. 1 Typical Output Characteristic

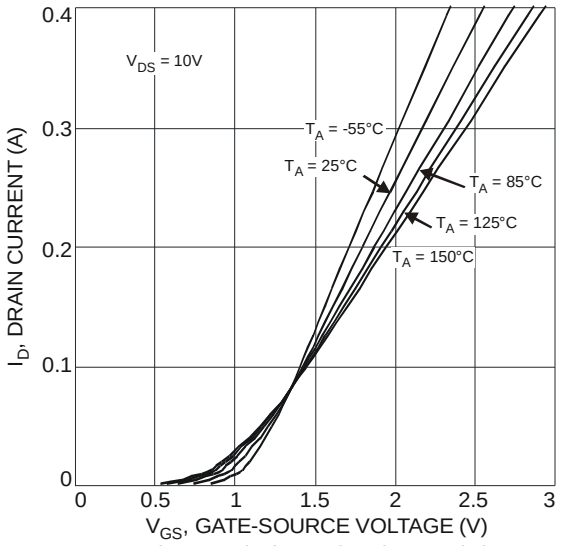

Fig. 2 Typical Transfer Characteristic

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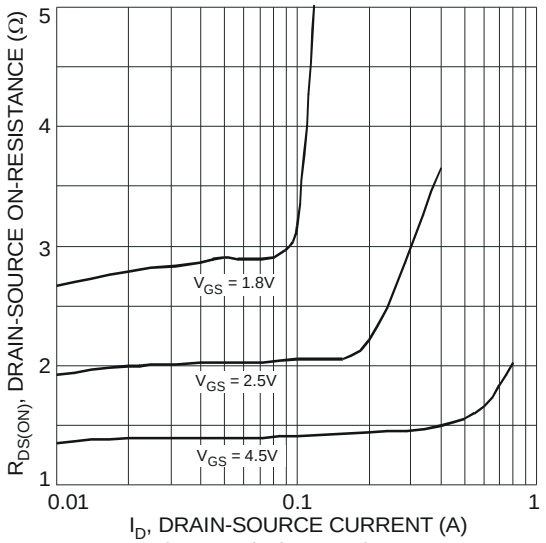

Fig. 3 Typical On-Resistance vs. Drain Current and Gate Voltage

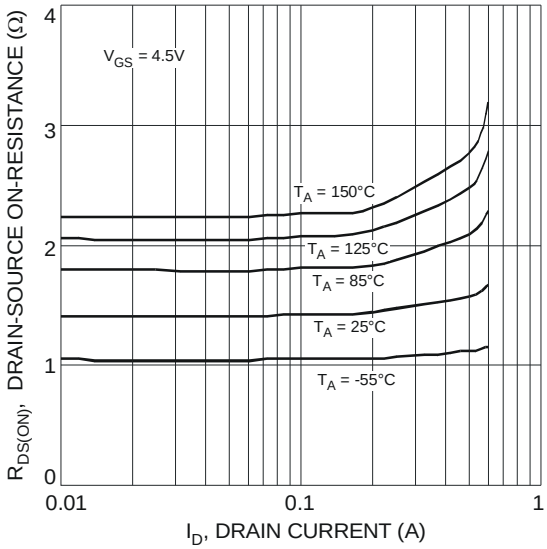

Fig. 4 Typical On-Resistance vs. Drain Current and Temperature

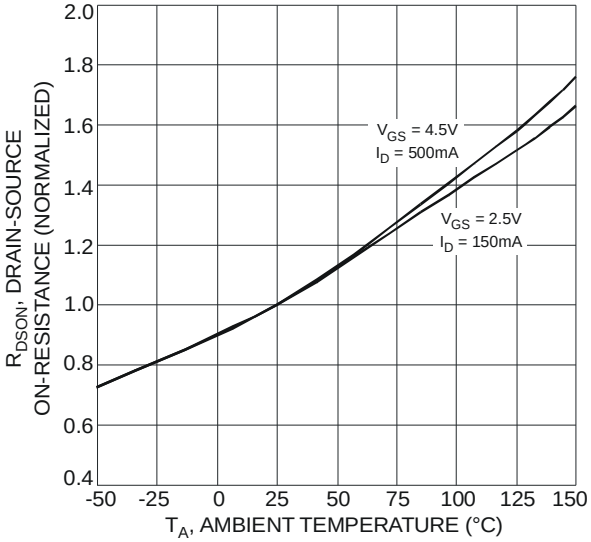

Fig. 5 On-Resistance Variation with Temperature

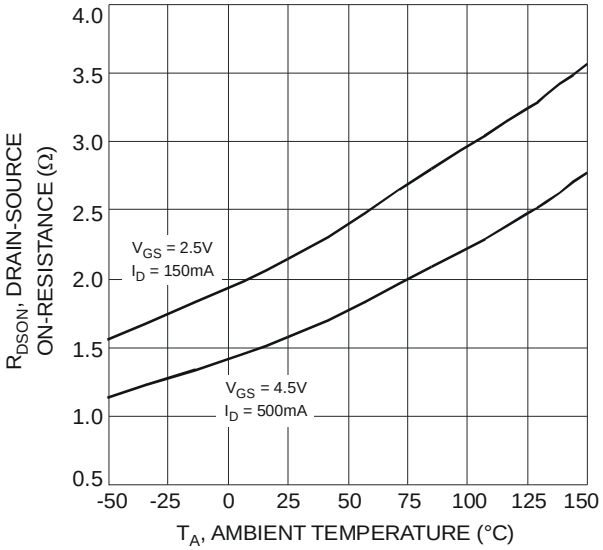

Fig. 6 On-Resistance Variation with Temperature

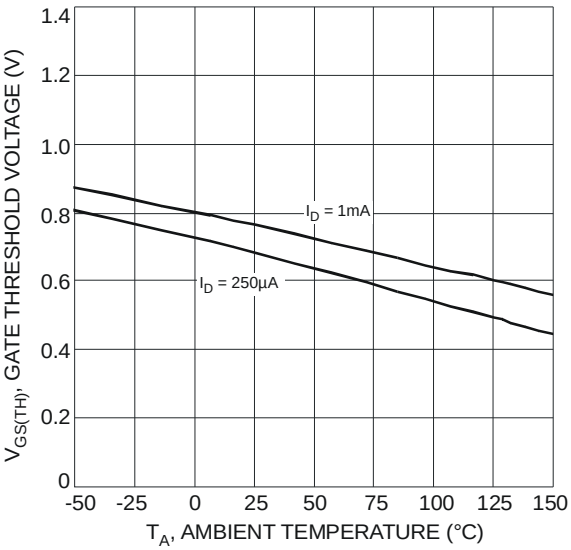

Fig. 7 Gate Threshold Variation vs. Ambient Temperature

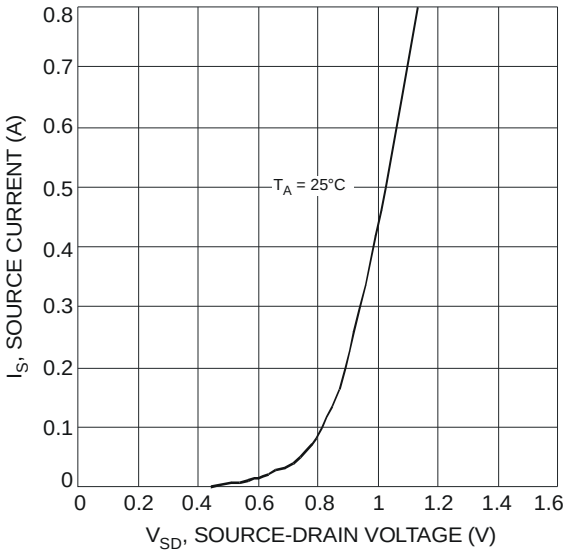

Fig. 8 Diode Forward Voltage vs. Current

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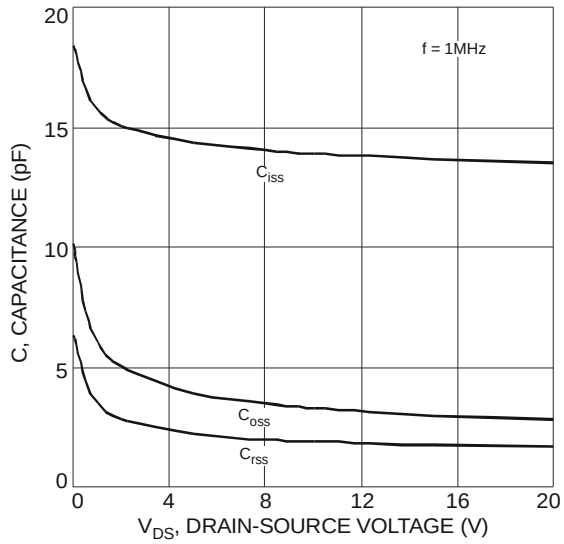


Fig. 9 Typical Total Capacitance

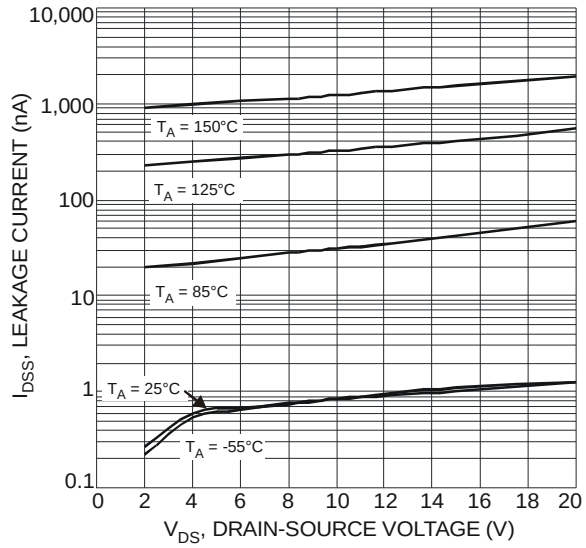


Fig. 10 Typical Leakage Current vs. Drain-Source Voltage

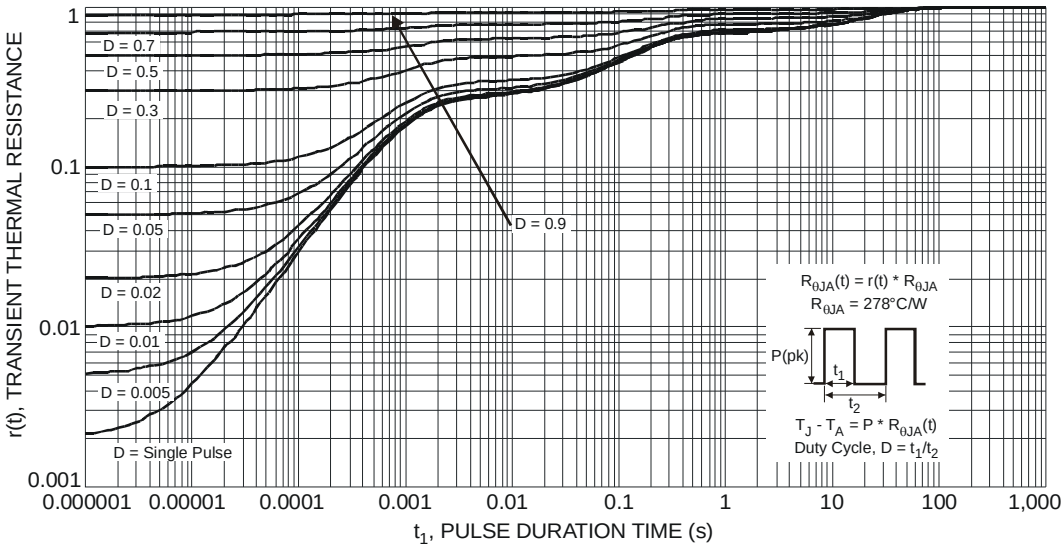


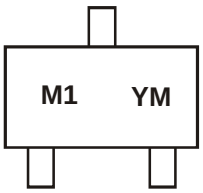
Fig. 11 Transient Thermal Response

Ordering Information (Note 6)

Part Number	Case	Packaging
DMN26D0UT-7	SOT-523	3,000/Tape & Reel

Notes: 6. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



M1 = Product Type Marking Code
YM = Date Code Marking
Y = Year (ex: W = 2009)
M = Month (ex: 9 = September)

Date Code Key

Year	2009	2010	2011	2012	2013	2014	2015
Code	W	X	Y	Z	A	B	C

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

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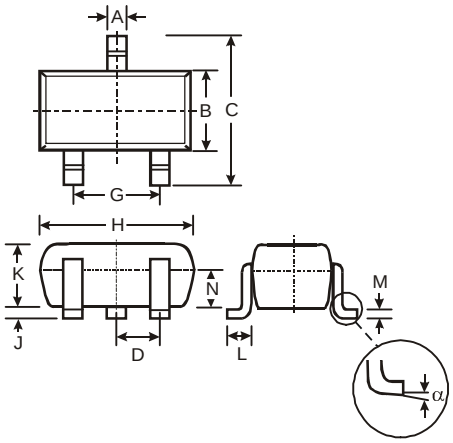
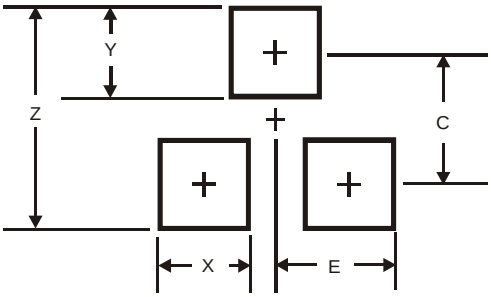
Package Outline Dimensions



SOT-523			
Dim	**Min**	**Max**	**Typ**
A	0.15	0.30	0.22
B	0.75	0.85	0.80
C	1.45	1.75	1.60
D	—	—	0.50
G	0.90	1.10	1.00
H	1.50	1.70	1.60
J	0.00	0.10	0.05
K	0.60	0.80	0.75
L	0.10	0.30	0.22
M	0.10	0.20	0.12
N	0.45	0.65	0.50
α	0°	8°	—
All Dimensions in mm			

Suggested Pad Layout



Dimensions	Value (in mm)
Z	1.8
X	0.4
Y	0.51
C	1.3
E	0.7

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2. support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in significant injury to the user.

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