Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
STATIC PARAMETERS						
Drain-Source Breakdown Voltage	BV_{DSS}	-20	—	—	V	I_D = -250μA, V_{GS} = 0V
Zero Gate Voltage Drain Current T_J = 25°C	I_{DSS}	—	—	-1	μA	V_{DS} = -20V, V_{GS} = 0V
Gate-Body Leakage Current	I_{GSS}	—	—	±100	nA	V_{DS} = 0V, V_{GS} = ±12V
Gate Threshold Voltage	$V_{GS(th)}$	-0.6	-0.96	-1.2	V	V_{DS} = V_{GS}, I_D = -250μA
On State Drain Current (Note 5)	$I_{D(ON)}$	-15	—	—	A	V_{GS} = -4.5V, V_{DS} = -5V
Static Drain-Source On-Resistance (Note 5)	$R_{DS(ON)}$	—	29 55	40 70	mΩ	V_{GS} = -4.5V, I_D = -4.6A V_{GS} = -2.5V, I_D = -3.8A
Forward Transconductance (Note 5)	g_{FS}	—	9	—	S	V_{DS} = -10V, I_D = -4.5A
Diode Forward Voltage (Note 5)	V_{SD}	-0.5	-0.72	-1.4	V	I_S = -2.1A, V_{GS} = 0V
Maximum Body-Diode Continuous Current (Note 1)	I_S	—	—	1.7	A	—
DYNAMIC PARAMETERS (Note 6)						
Input Capacitance	C_{iss}	—	820	—	pF	V_{DS} = -15V, V_{GS} = 0V f = 1.0MHz
Output Capacitance	C_{oss}	—	200	—	pF	
Reverse Transfer Capacitance	C_{rss}	—	160	—	pF	
Gate Resistance	R_G	—	2.5	—	Ω	V_{DS} = 0V, V_{GS} = 0V f = 1.0MHz
SWITCHING CHARACTERISTICS						
Total Gate Charge	Q_G	—	10.1	—	nC	V_{DS} = -10V, V_{GS} = -4.5V, I_D = -4.5A
Gate-Source Charge	Q_{GS}	—	1.5	—		
Gate-Drain Charge	Q_{GD}	—	4.3	—		
Turn-On Delay Time	$t_{d(on)}$	—	4.4	—	ns	V_{DS} = -10V, V_{GS} = -4.5V, I_D = -1A, R_G = 6.0Ω
Rise Time	t_r	—	9.9	—		
Turn-Off Delay Time	$t_{d(off)}$	—	28.0	—		
Fall Time	t_f	—	23.4	—		

Notes: 5. Test pulse width t = 300μs.
6. Guaranteed by design. Not subject to production testing.

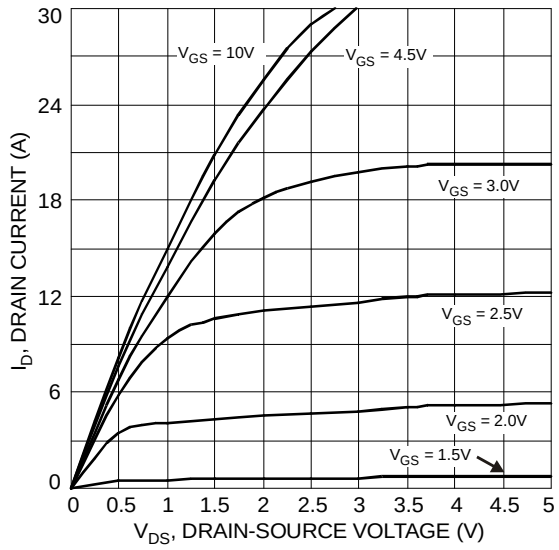

Fig. 1 Typical Output Characteristic

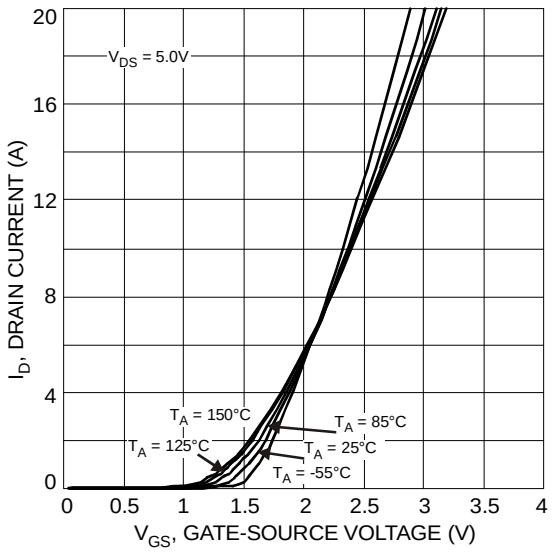

Fig. 2 Typical Transfer Characteristic

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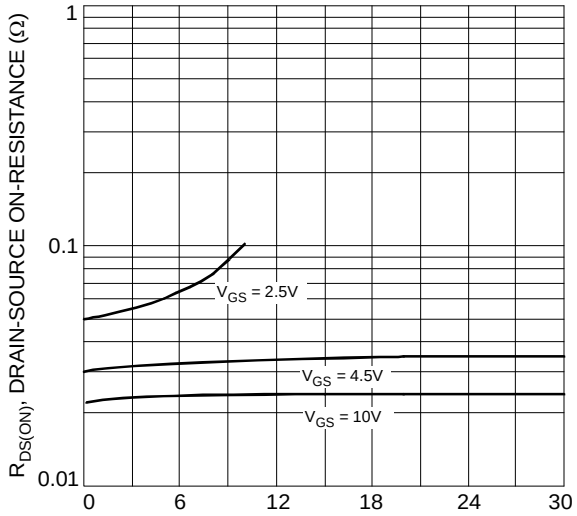

Fig. 3 Typical On-Resistance vs. Drain Current and Gate Voltage

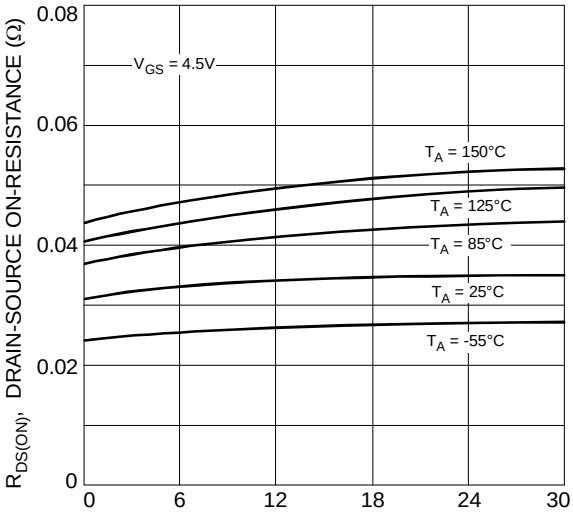

Fig. 4 Typical On-Resistance vs. Drain Current and Temperature

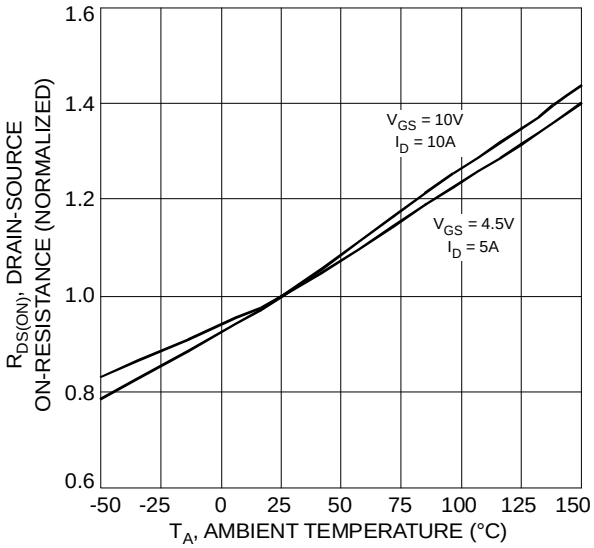

Fig. 5 Normalized On-Resistance vs. Ambient Temperature

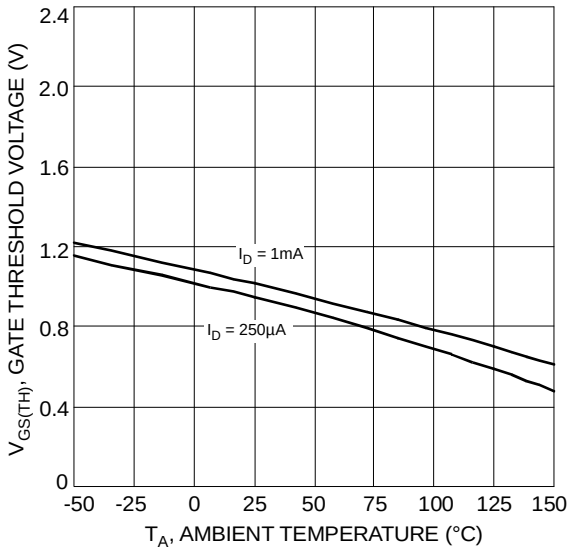

Fig. 6 Gate Threshold Variation vs. Ambient Temperature

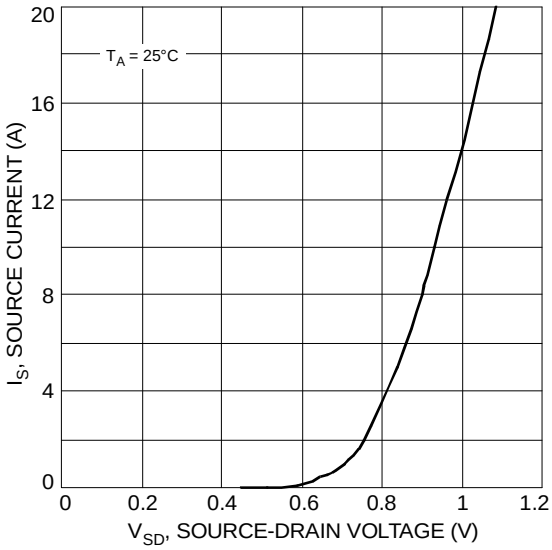

Fig. 7 Diode Forward Voltage vs. Current

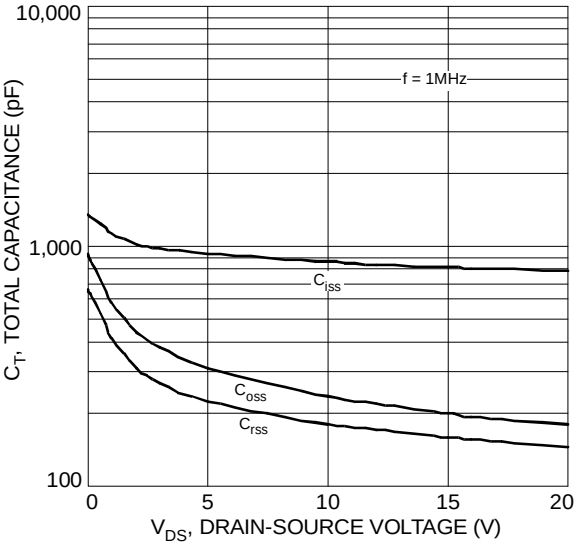

Fig. 8 Typical Total Capacitance

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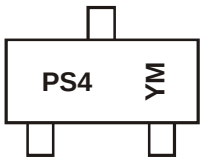
Ordering Information (Note 7)

Part Number	Case	Packaging
DMP2066LSN-7	SC-59	3000/Tape & Reel

Notes: 7. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



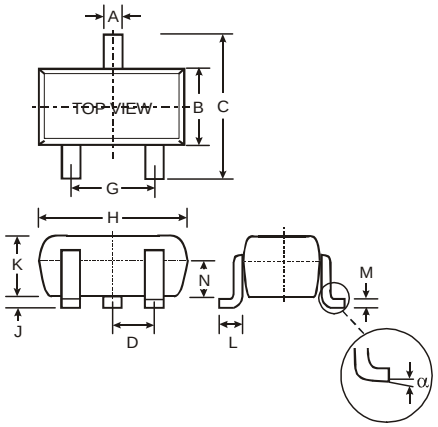
PS4 = Product Type Marking Code
YM = Date Code Marking
Y = Year ex: V = 2008
M = Month ex: 9 = September

Date Code Key

Year	2008	2009	2010	2011	2012	2013	2014	2015
Code	V	W	X	Y	Z	A	B	C

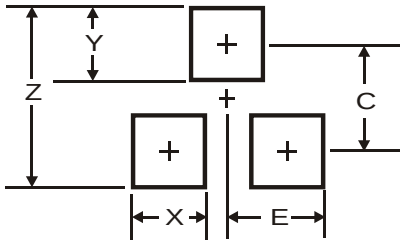
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

Package Outline Dimensions



SC-59		
Dim	Min	Max
A	0.35	0.50
B	1.50	1.70
C	2.70	3.00
D	0.95	
G	1.90	
H	2.90	3.10
J	0.013	0.10
K	1.00	1.30
L	0.35	0.55
M	0.10	0.20
N	0.70	0.80
α	0°	8°
All Dimensions in mm		

Suggested Pad Layout



Dimensions	Value (in mm)
Z	3.4
X	0.8
Y	1.0
C	2.4
E	1.35

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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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