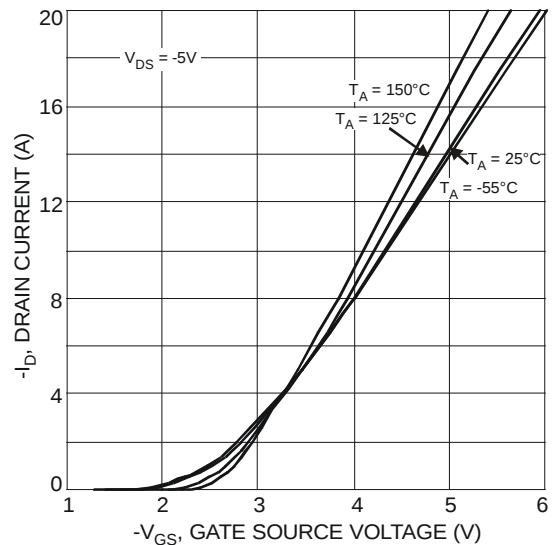
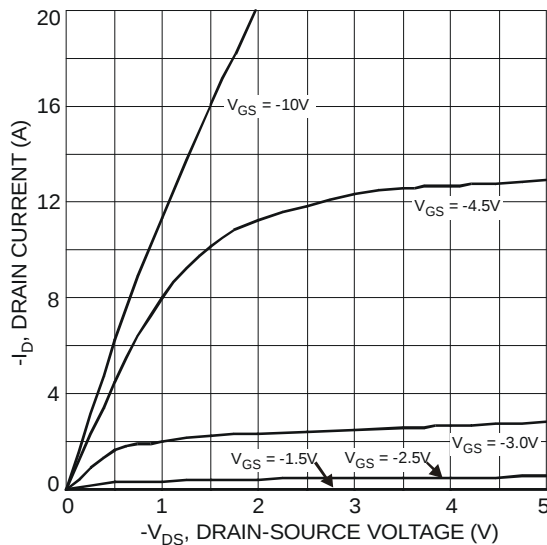


Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
OFF CHARACTERISTICS (Note 5)						
Drain-Source Breakdown Voltage	BV _{DSS}	-30	—	—	V	V _{GS} = 0V, I _D = -250μA
Zero Gate Voltage Drain Current	I _{DSS}	—	—	-1	μA	V _{DS} = -30V, V _{GS} = 0V
Gate-Source Leakage	I _{GSS}	—	—	±100	nA	V _{GS} = ±20V, V _{DS} = 0V
ON CHARACTERISTICS (Note 5)						
Gate Threshold Voltage	V _{GS(th)}	-1	—	-2.1	V	V _{DS} = V _{GS} , I _D = -250μA
Static Drain-Source On-Resistance	R _{DS(ON)}	—	56 98	65 115	mΩ	V _{GS} = -10V, I _D = -5.3A V _{GS} = -4.5V, I _D = -4.2A
Forward Transconductance	g _{fs}	—	5.2	—	S	V _{DS} = -10V, I _D = -5.3A
Diode Forward Voltage (Note 5)	V _{SD}	-0.5	—	-1.2	V	V _{GS} = 0V, I _S = -2A
DYNAMIC CHARACTERISTICS						
Input Capacitance	C _{iss}	—	336	—	pF	V _{DS} = -25V, V _{GS} = 0V f = 1.0MHz
Output Capacitance	C _{oss}	—	70	—	pF	
Reverse Transfer Capacitance	C _{rss}	—	49	—	pF	
Gate Resistance	R _G	—	4.6	—	Ω	V _{DS} = 0V, V _{GS} = 0V f = 1.0MHz
SWITCHING CHARACTERISTICS						
Total Gate Charge	Q _G	—	4.0	—	nC	V _{DS} = -15V, V _{GS} = -4.5V, I _D = -5.0A
	Q _G	—	7.8	—	nC	
Gate-Source Charge	Q _{GS}	—	1.0	—	nC	V _{DS} = -15V, V _{GS} = -10V, I _D = -5.0A
Gate-Drain Charge	Q _{GD}	—	2.5	—		
Turn-On Delay Time	t _{d(on)}	—	6.0	—	ns	V _{DS} = -15V, V _{GS} = -10V, I _D = -1A, R _G = 6.0Ω
Rise Time	t _r	—	5.0	—		
Turn-Off Delay Time	t _{d(off)}	—	17.6	—		
Fall Time	t _f	—	9.5	—		

Notes: 5. Short duration pulse test used to minimize self-heating effect.



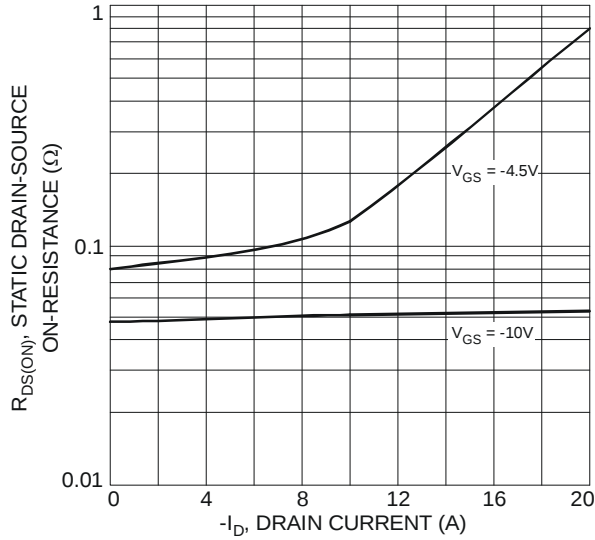


Fig. 3 Typical On-Resistance vs. Drain Current and Gate Voltage

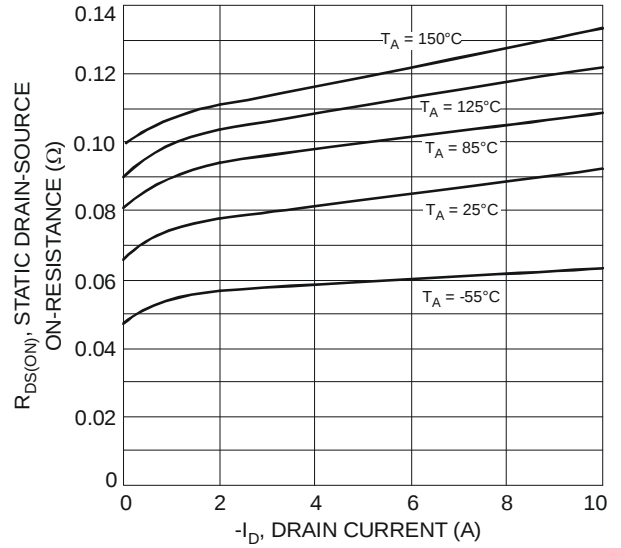


Fig. 4 Typical On-Resistance vs. Drain Current and Temperature

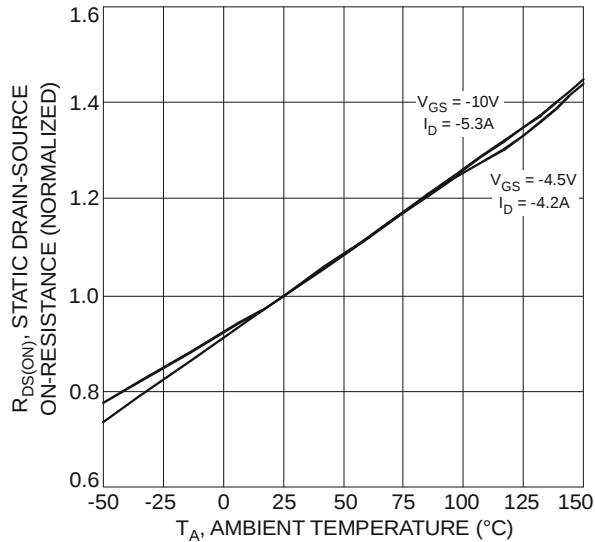


Fig. 5 On-Resistance Variation with Temperature

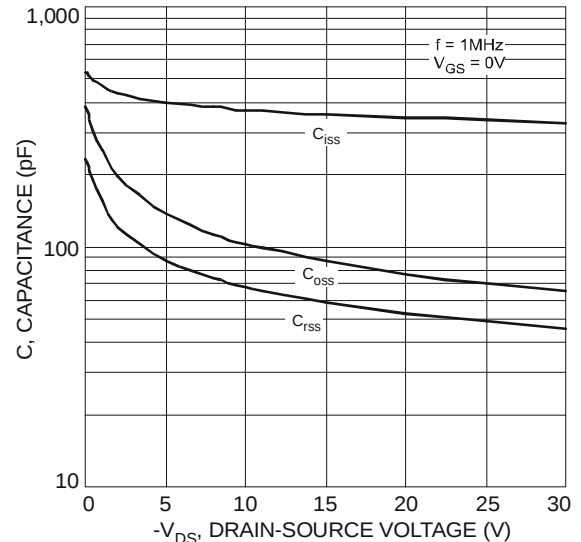


Fig. 6 Typical Capacitance

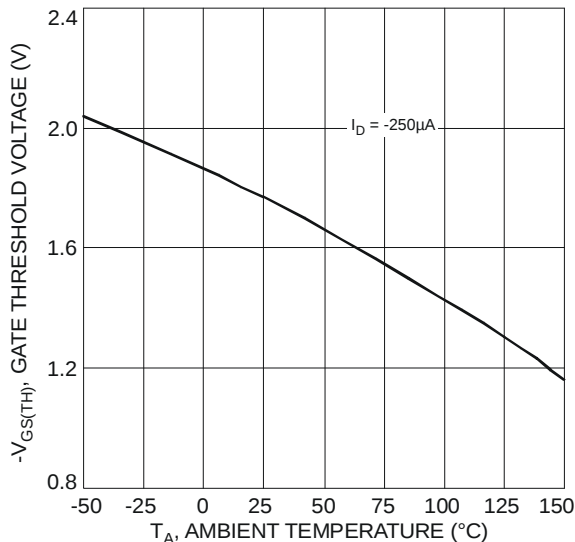


Fig. 7 Gate Threshold Variation vs. Ambient Temperature

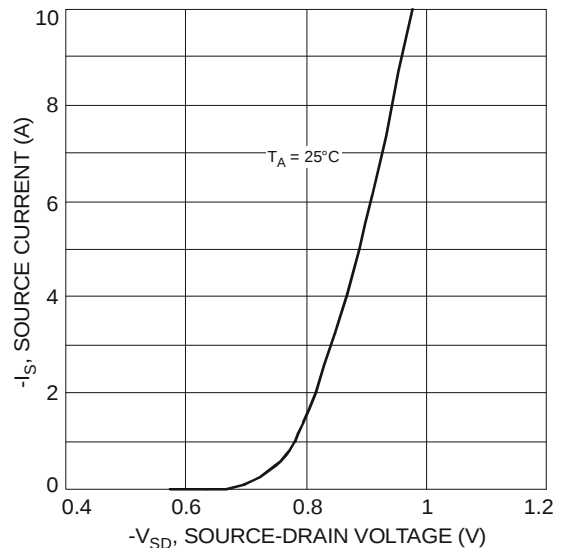


Fig. 8 Diode Forward Voltage vs. Current

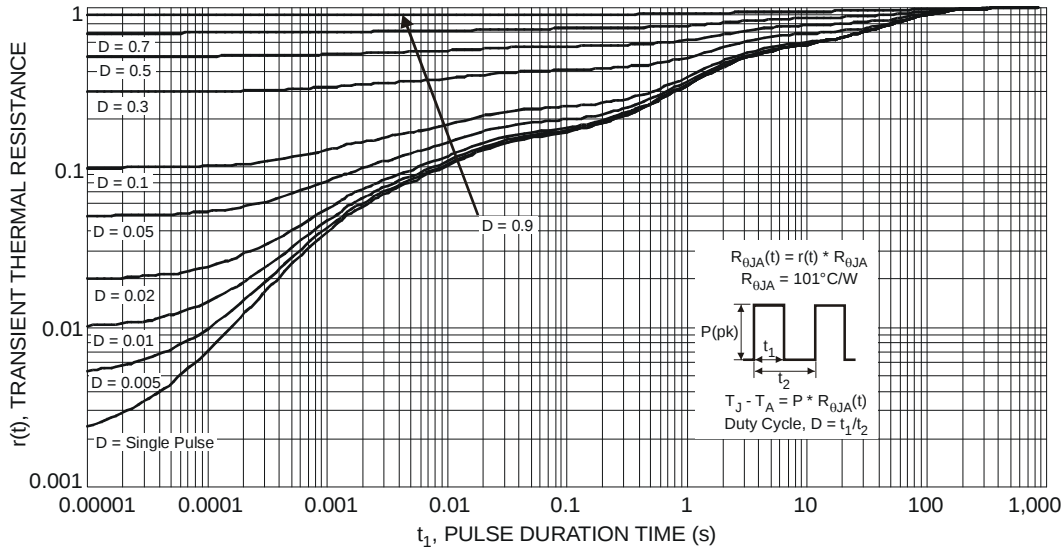
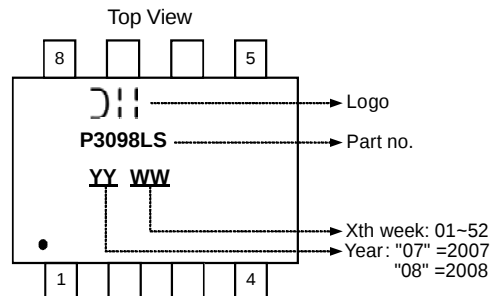
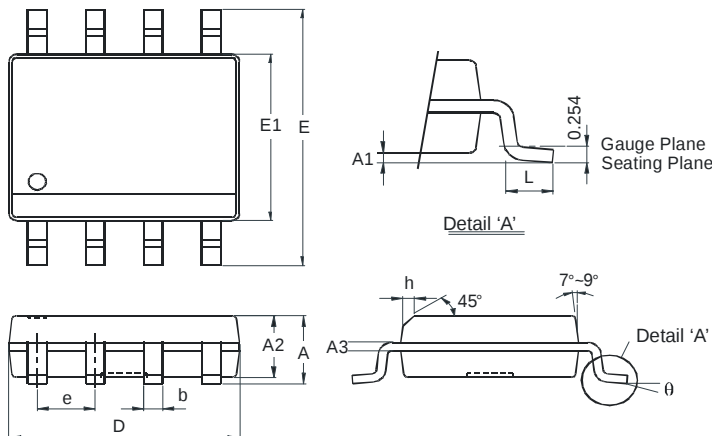


Fig. 9 Transient Thermal Response

Ordering Information (Note 6)

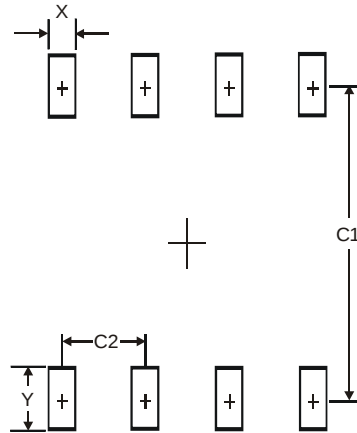
Part Number	Case	Packaging
DMP3098LSS-13	SOP-8L	2500/Tape & Reel

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

Marking Information

Package Outline Dimensions


SOP-8L		
Dim	Min	Max
A	-	1.75
A1	0.08	0.25
A2	1.40	1.50
A3	0.20 Typ	
b	0.3	0.5
D	4.85	4.95
E	5.90	6.10
E1	3.80	3.90
e	1.27 Typ	
h	-	0.35
L	0.60	0.80
θ	0°	8°
All Dimensions in mm		

Suggested Pad Layout



Dimensions	Value (in mm)
X	0.60
Y	1.55
C1	5.4
C2	1.27

IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.