PDFN5×6A N

Dual N-CHANNEL MOSFET in a PDFN5×6A Plastic Package.

V_{DS}(V)=100V I_D=13.7A

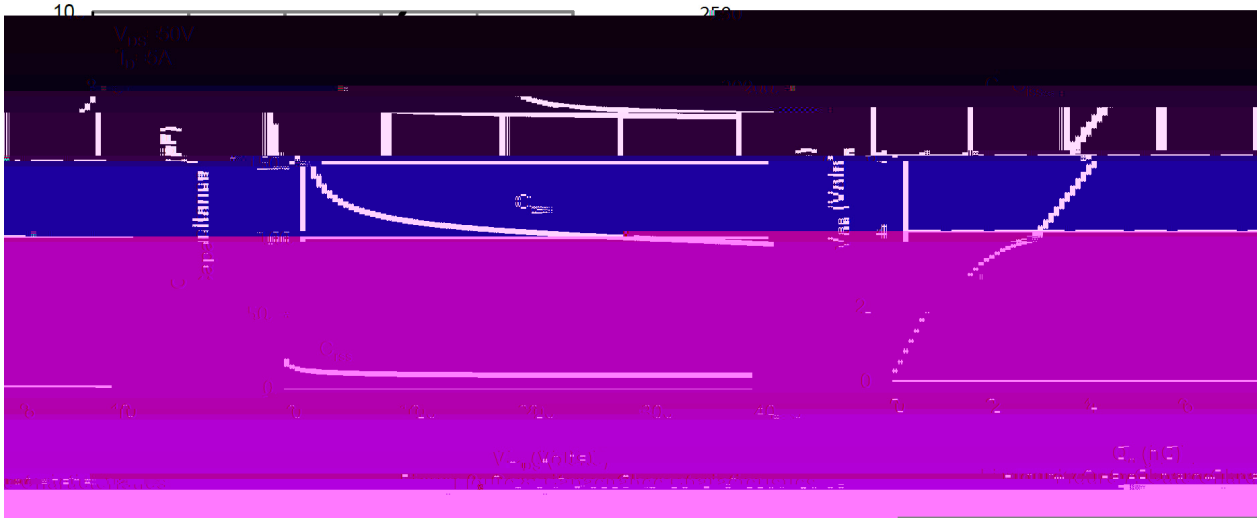
R

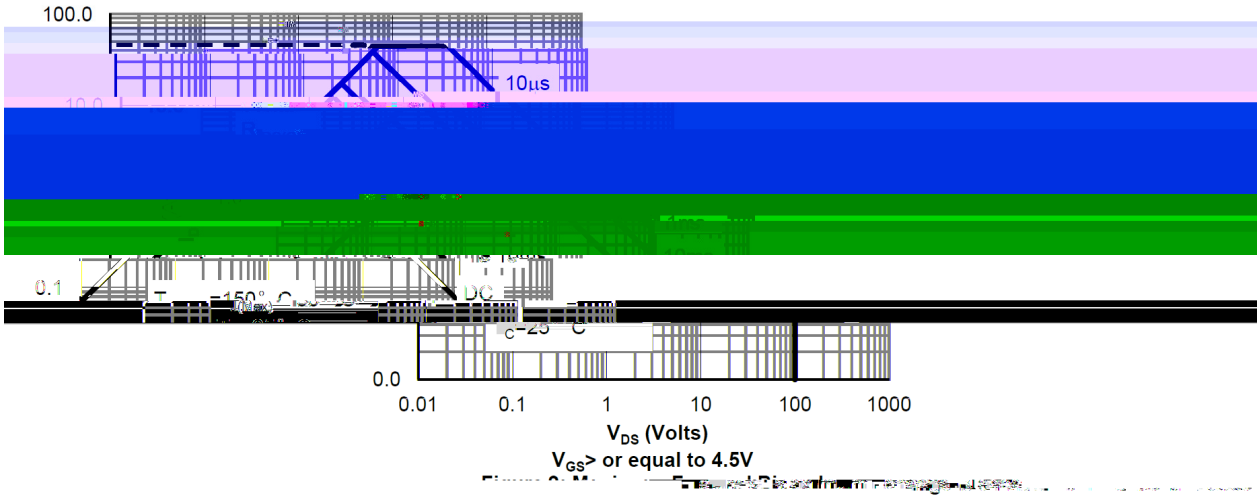
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Continuous Drain Current	I_D	13.7	A
Pulsed Drain Current	I_{DM}	48	A
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation	$P_D(T_c=25\ \ )$	35.7	W
Avalanche energy(L=0.5mH)	E_{AS}	2.7	mJ
Avalanche Current(L=0.5mH)	I_{AS}	3.3	A

/ Electrical Characteristics(Ta=25)

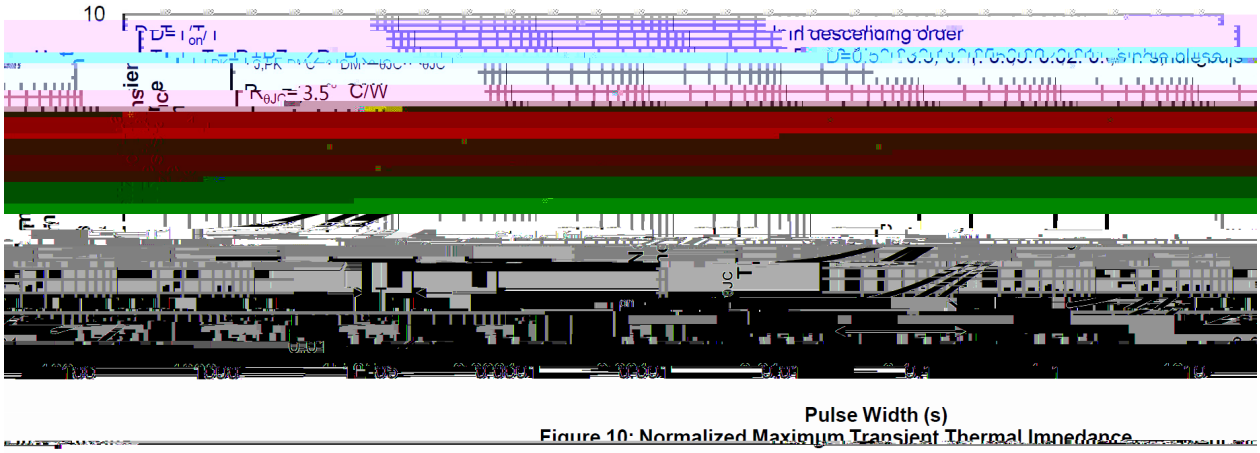
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=50V R_L=10Ω R_{GEN}=3Ω		4		ns
Turn-On Rise Time	t_r			2		
Turn-Off Delay Time	$t_{d(off)}$			15		
Turn-Off Fall Time	t_f			2		

/ Electrical Characteristic Curve





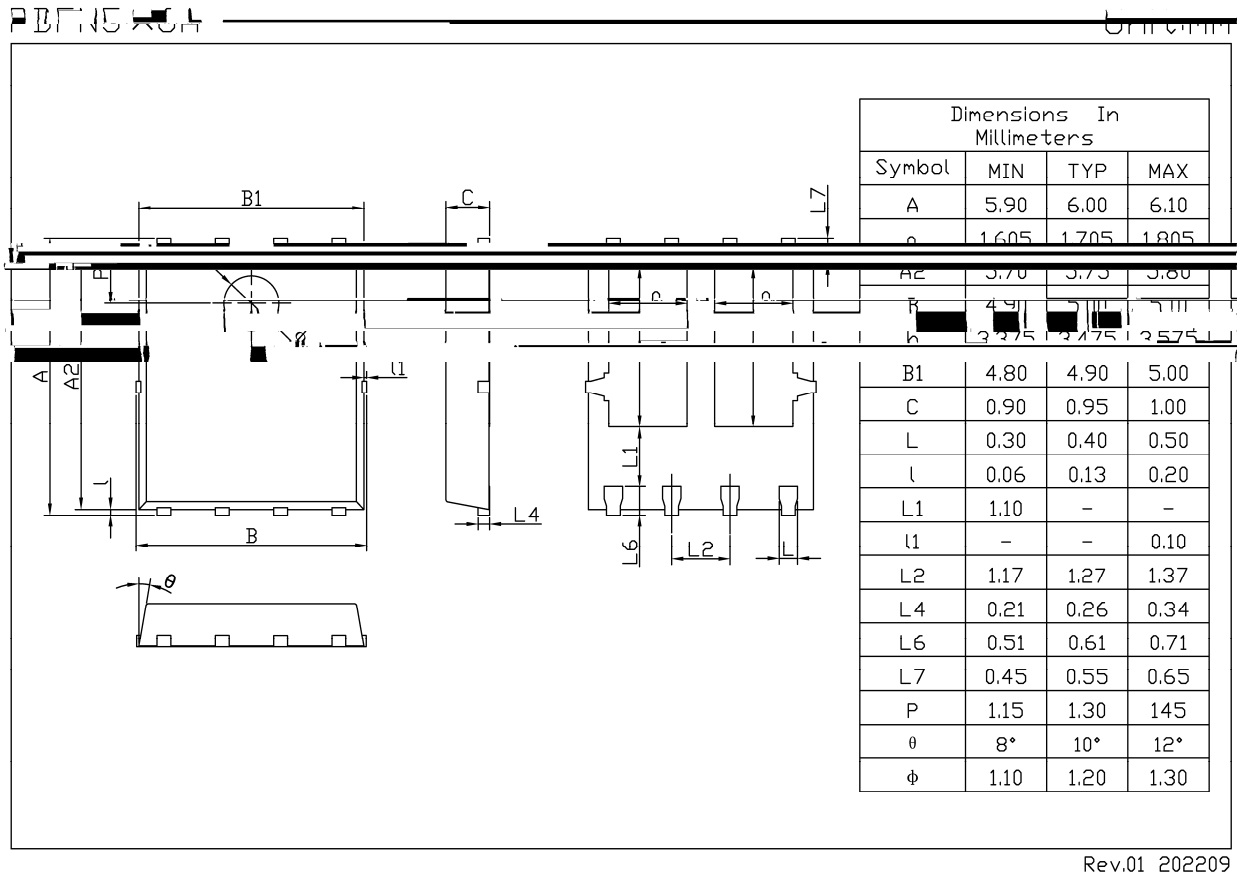
Safe Operating Area



Pulse Width (s)

Figure 10: Normalized Maximum Transient Thermal Impedance

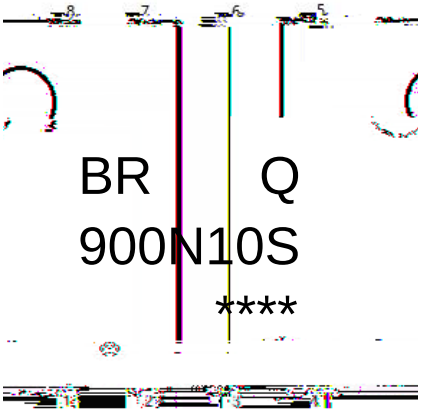
/ Package Dimensions



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
[illegible]	1.605	1.705	1.805
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
B1	4.80	4.90	5.00
C	0.90	0.95	1.00
L	0.30	0.40	0.50
l	0.06	0.13	0.20
L1	1.10	–	–
l1	–	–	0.10
L2	1.17	1.27	1.37
L4	0.21	0.26	0.34
L6	0.51	0.61	0.71
L7	0.45	0.55	0.65
P	1.15	1.30	145
θ	8°	10°	12°
ϕ	1.10	1.20	1.30

Rev.01 202209

/ Marking Instructions



BR	
Q	
900N10S	
****	
Note	
BR	Company Code
Q:	Automobile halogen-free product Code
900N10S	Product Type Code
****:	Lot No. Code, code change with Lot No

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)