Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	20	V
Drain Current		I_D(Tc=25)	8	A
Gate-Source Voltage		V_{GS}	±12	V
Avalanche Current		I_{AS}	12.5	A
Single Pulsed Avalanche Energy		E_{AS}	111	mJ
Power Dissipation		P_D(Tc=25)	2.8	W
Junction Temperature Range		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	
Maximum Junction-to-Ambient	t 10s	R JA	45	/W
	Steady-State	R JA	80	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250μA	20	25		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=20V V_{GS}=0V			1.0	μA
		V_{DS}=16V T_J=150			50	
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±12V V_{DS}=0V			±0.1	μA
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=8.0A		8	10	mΩ
		V_{GS}=4.5V I_D=8.0A		9.5	11	mΩVD
		V_{GS}=2.5V I_D=8.0A		14	16	mΩ

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_{g(4.5V)}$	V_{DS}=10V V_{GS}=4.5V I_D=12.0A		17.9		nC
Gate-Source Charge	Q_{gs}			1.5		

/ Electrical Characteristic Curve

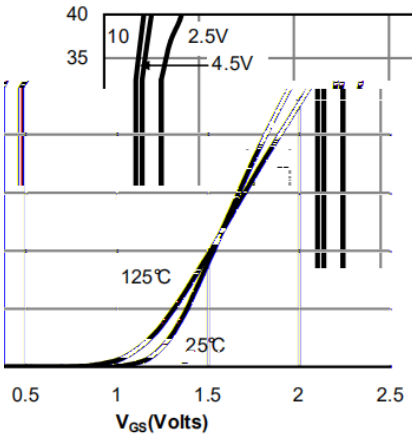


Figure 2: Transfer Characteristics

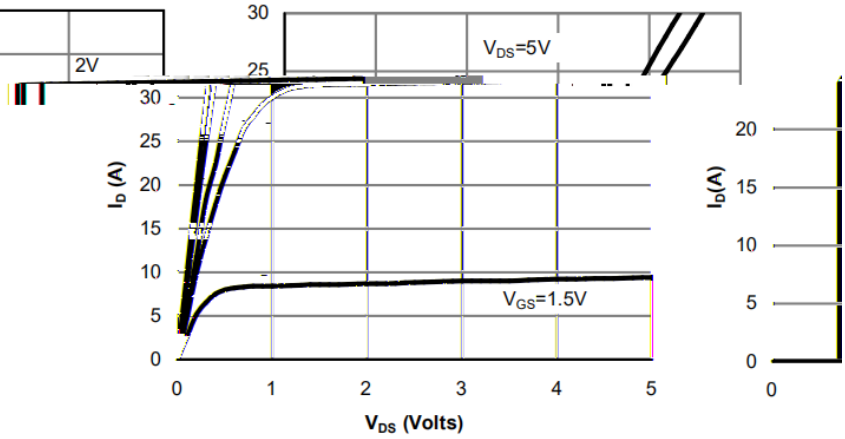
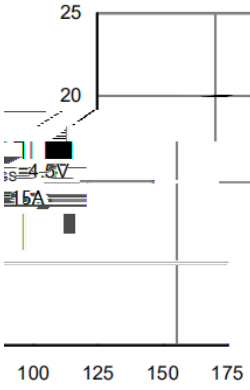


Fig 1: On-Region Characteristics



ture (℃)
tance vs. Junction
Temperature

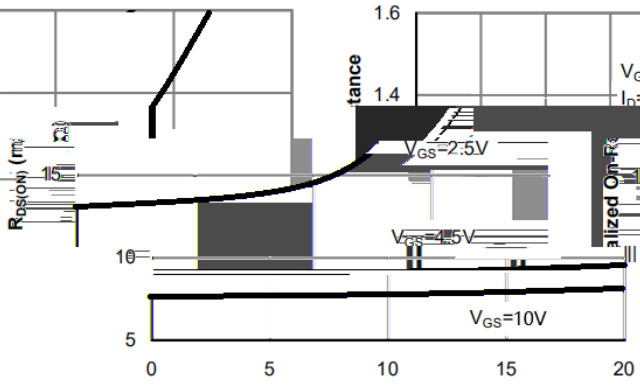
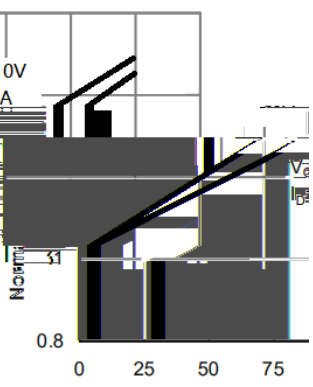
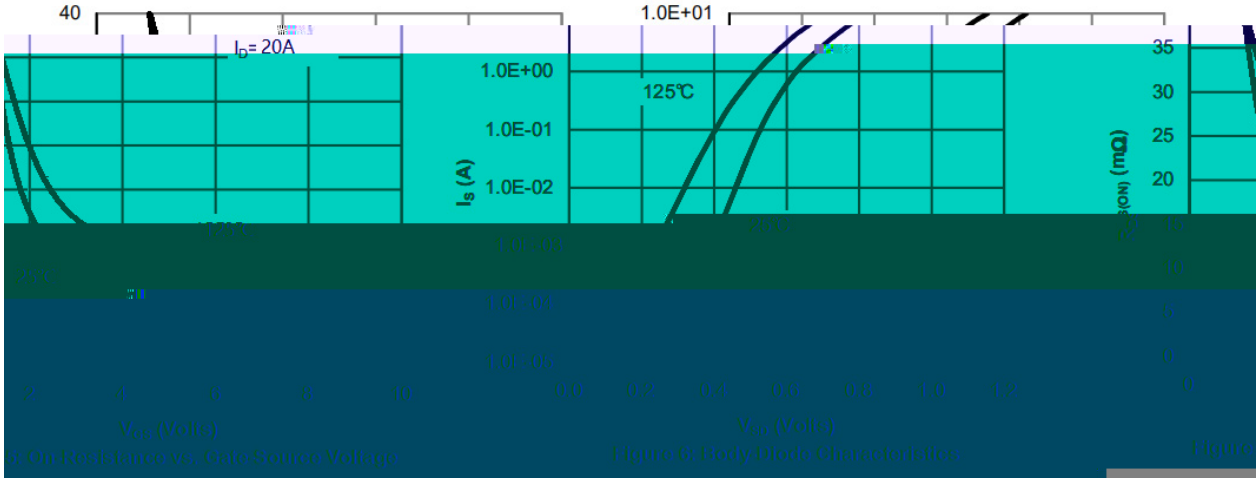


Figure 3: On-Resistance vs. Drain Current and



Tempera
Figure 4: On-Resis



/ Electrical Characteristic Curve

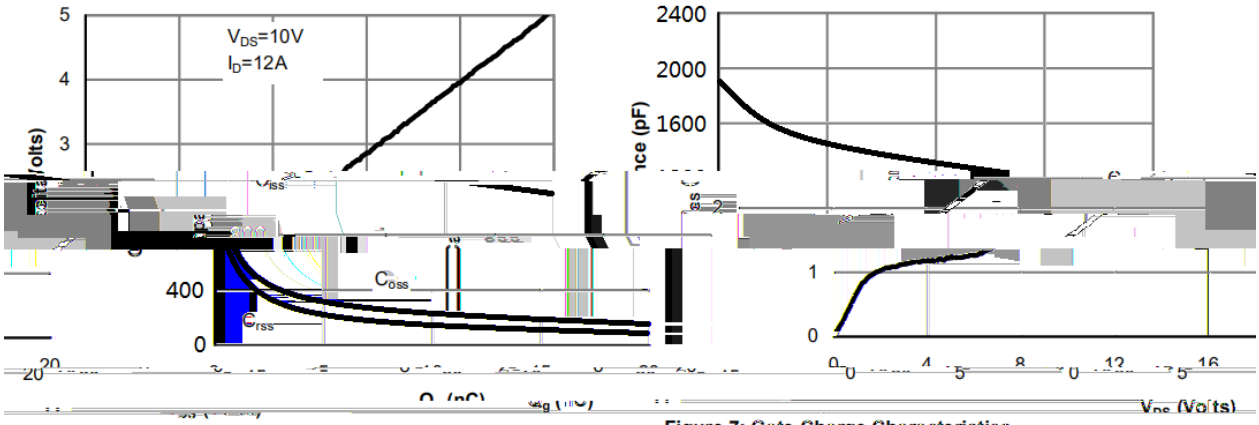
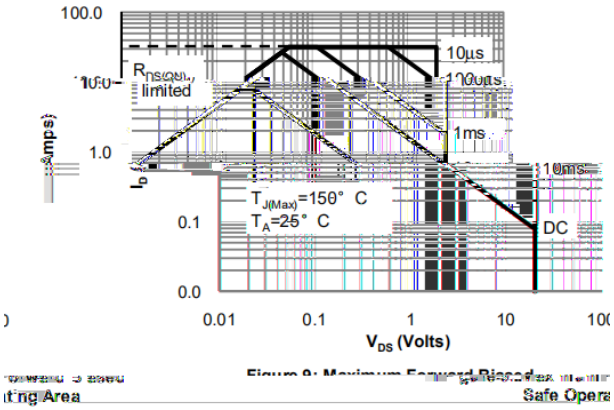


Figure 8: Capacitance Characteristics

Figure 7: Gate-Charge Characteristics



Safe Operating Area

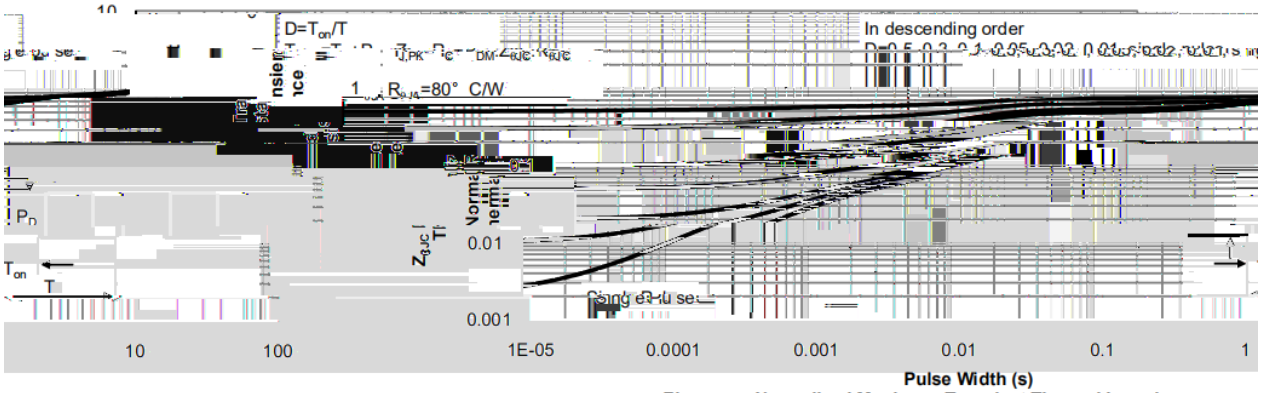
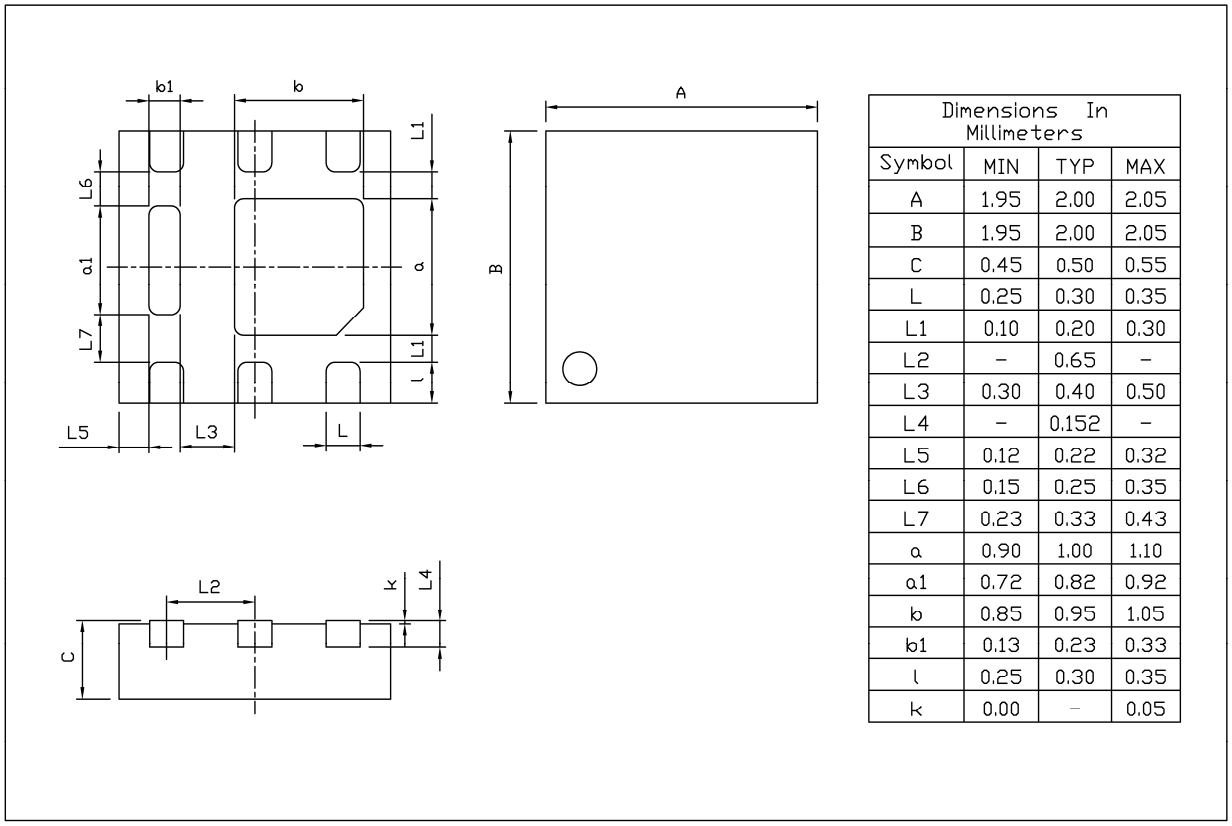


Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

DFN2×2B-6L-0.5 Unit:mm



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	1.95	2.00	2.05
B	1.95	2.00	2.05
C	0.45	0.50	0.55
L	0.25	0.30	0.35
L1	0.10	0.20	0.30
L2	–	0.65	–
L3	0.30	0.40	0.50
L4	–	0.152	–
L5	0.12	0.22	0.32
L6	0.15	0.25	0.35
L7	0.23	0.33	0.43
a	0.90	1.00	1.10
a1	0.72	0.82	0.92
b	0.85	0.95	1.05
b1	0.13	0.23	0.33
l	0.25	0.30	0.35
k	0.00	–	0.05

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