

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	20	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	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		$P_D(T_C=25^\circ\text{C})$	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}	$V_{GS}=0V$ $I_D=250\mu A$	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}	$V_{GS}=\pm 12V$ $V_{DS}=0V$			± 0.1	μA
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=8.0A$		8	10	m
		$V_{GS}=4.5V$ $I_D=8.0A$		9.5	11	m
		$V_{GS}=2.5V$ $I_D=8.0A$		14	16	m

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

/ Electrical Characteristic Curve

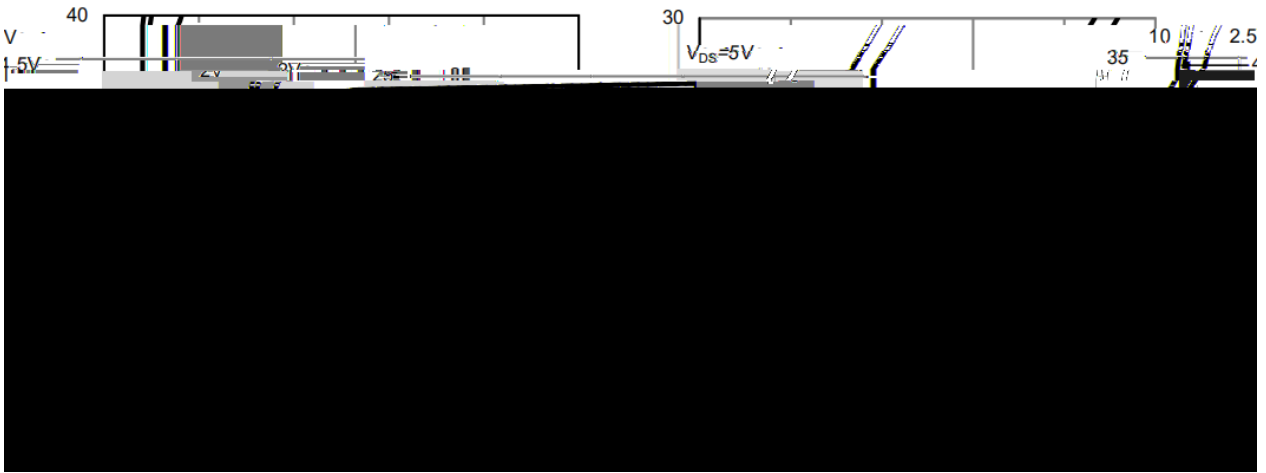


Figure 1: On-Resistance vs. Drain Current and Temperature

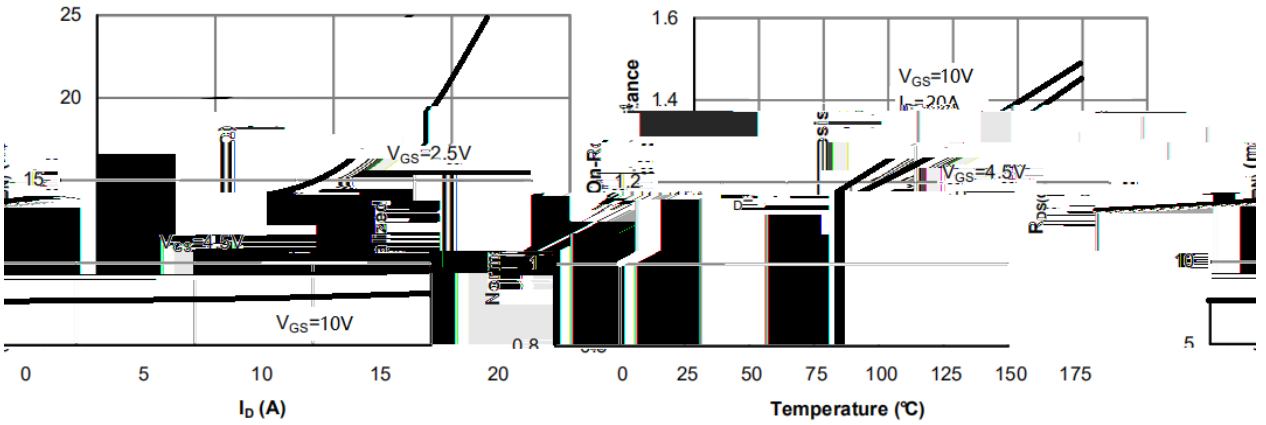


Figure 2: On-Resistance vs. Junction Temperature

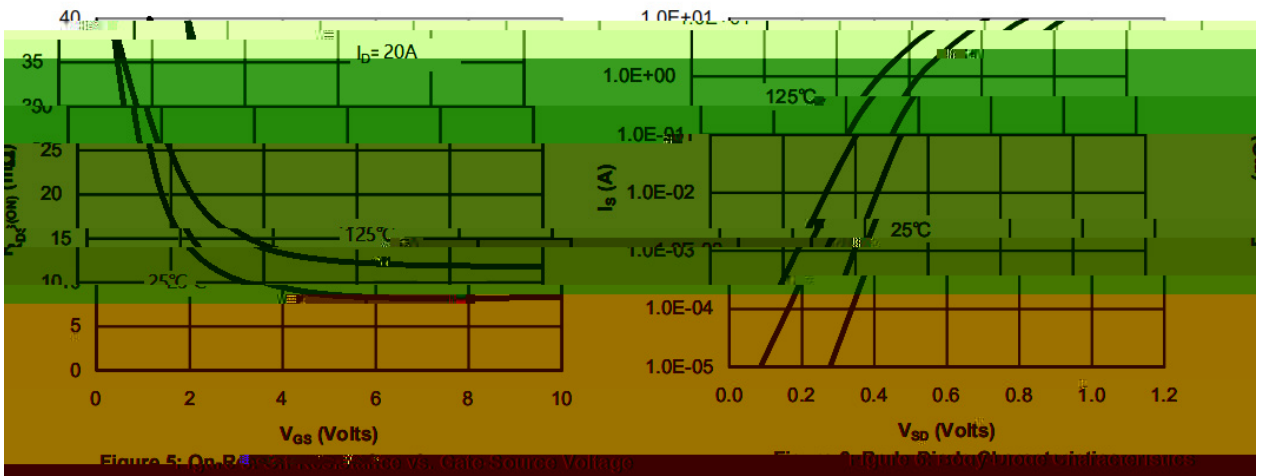
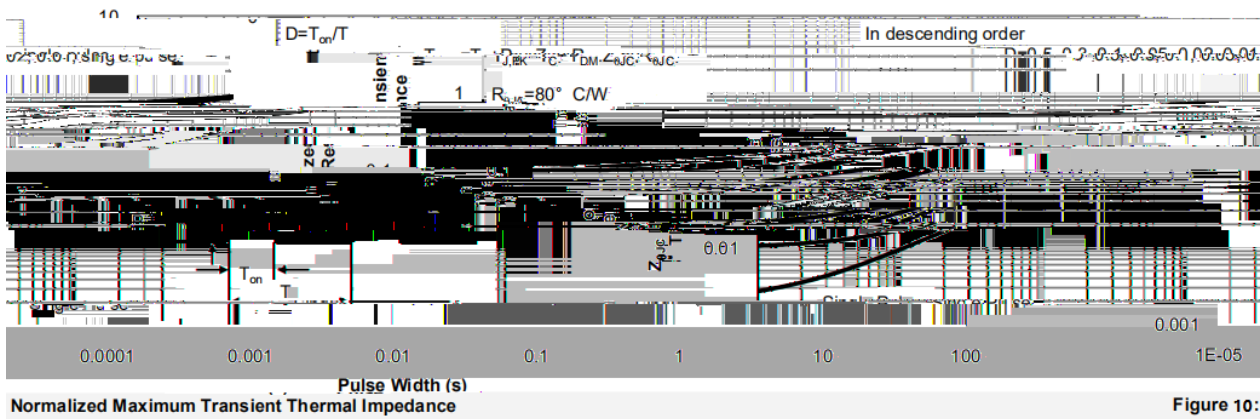
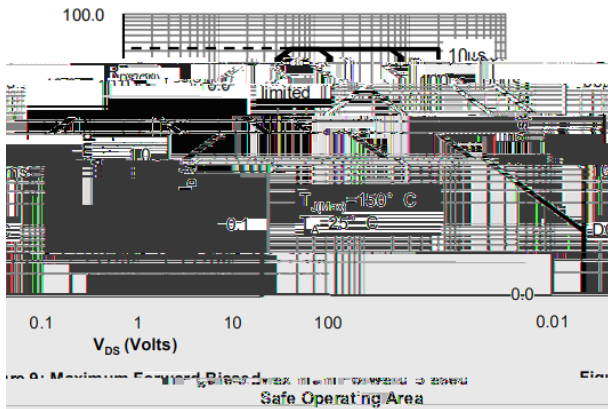
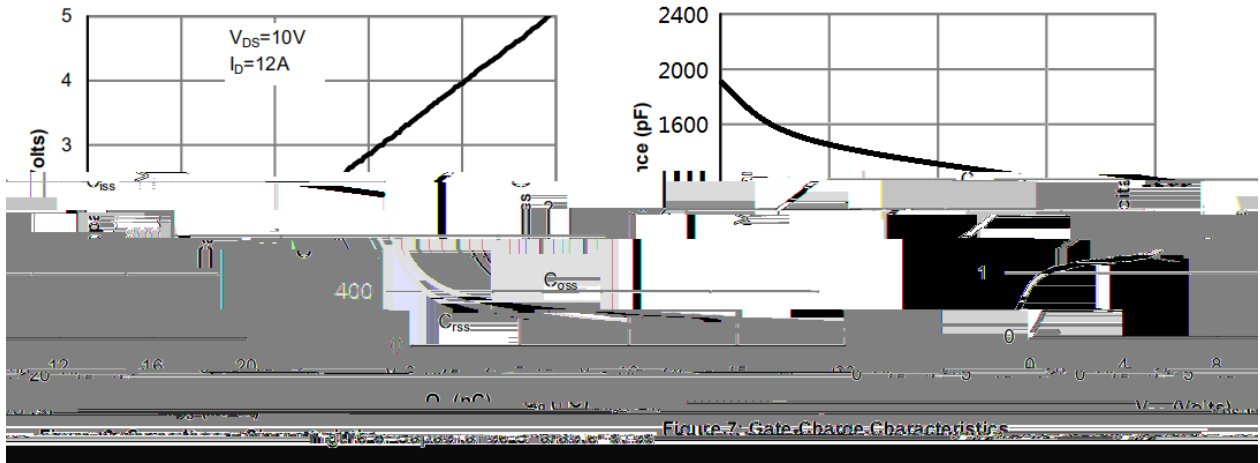


Figure 3: On-Resistance vs. Gate-Source Voltage and Drain-Source Voltage

Figure 4: On-Resistance vs. Drain-Source Voltage and Junction Temperature

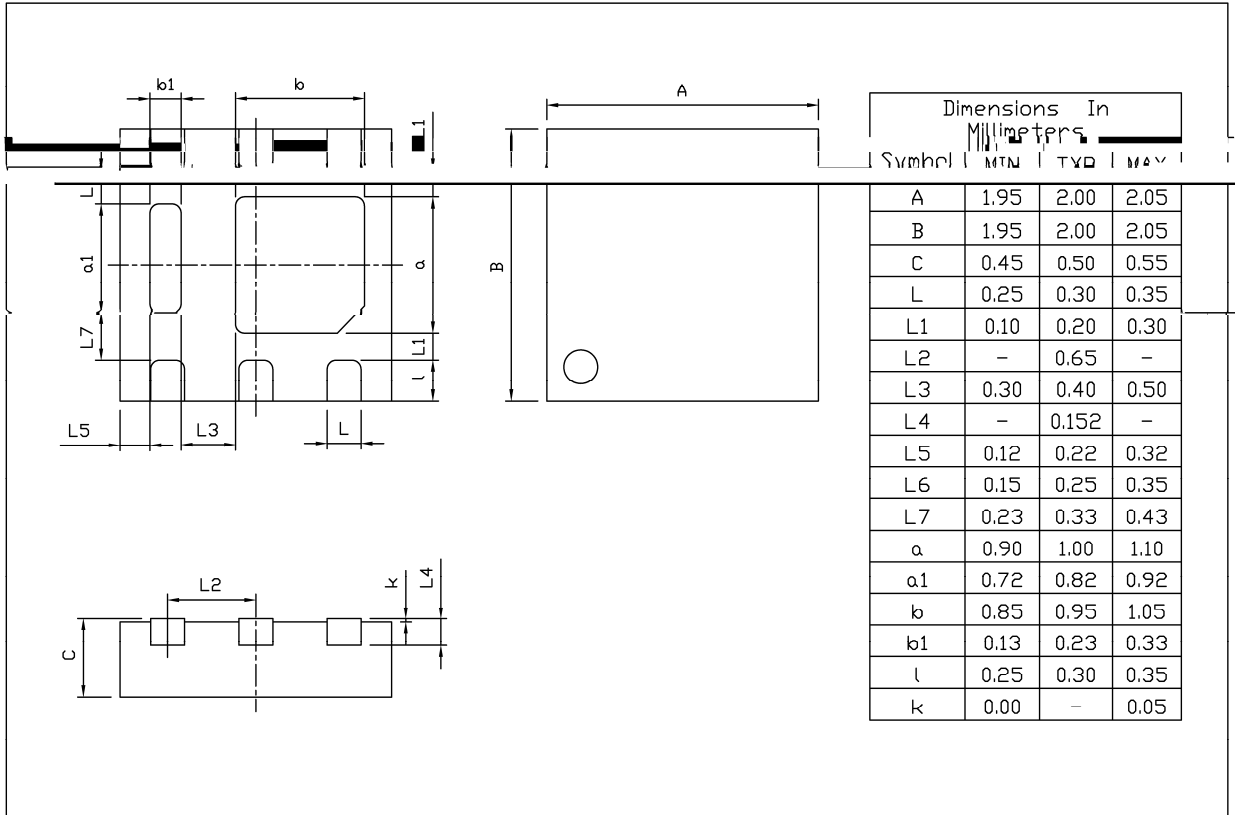
/ Electrical Characteristic Curve



/ Package Dimensions

DFN2 X2B-6L-0.5

Unit:mm



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