

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	20	V
Drain Current	$I_D(T_c=25\text{ }^{\circ}\text{C})$	8	A
	V_{GS}	± 12	V
	I_{AS}	12.5	A
	E_{AS}	111	mJ
	$P_D(T_c=25\text{ }^{\circ}\text{C})$	2.8	W
	T_j	150	
	T_{stg}	-55 ~ 150	
	$t \leq 10s$	$R_{\theta JA}$	45
	Steady-State	$R_{\theta JA}$	80

	Symbol	Test Conditions	Min	Typ	Max	Unit
	BV_{DS}	$V_{GS}=0V$ $I_D=250\text{ }\mu\text{A}$	20	25		V
	I_{DSS}	$V_{DS}=20V$ $V_{GS}=0V$			1.0	A
		$V_{DS}=16V$ $T_J=150$			50	
	I_{GSS}	$V_{GS}=\pm 12V$ $V_{DS}=0V$			± 0.1	A
	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=8.0A$		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

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		
Gate-Source Charge	Q_{gs}			1.5		nC

/ Electrical Characteristic Curve

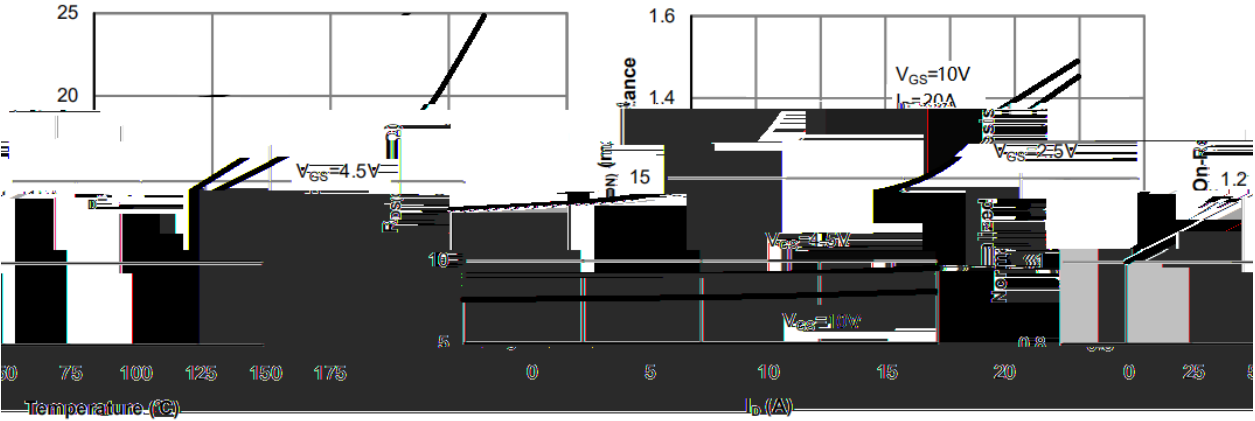


Figure 2: On-Resistance vs. Junction Temperature

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

Figure 4: On-Resistance vs. Drain Current and Gate-Source Voltage

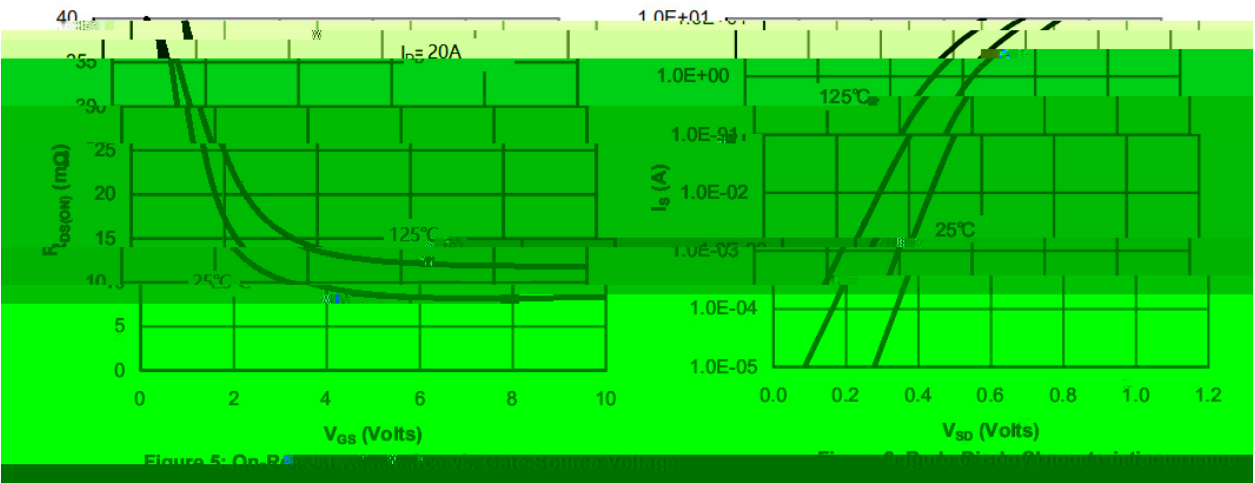


Figure 5: On-Resistance vs. Drain Current and Gate-Source Voltage

Figure 6: On-Resistance vs. Drain Current and Gate-Source Voltage

Figure 7: On-Resistance vs. Drain Current and Gate-Source Voltage

/ Electrical Characteristic Curve

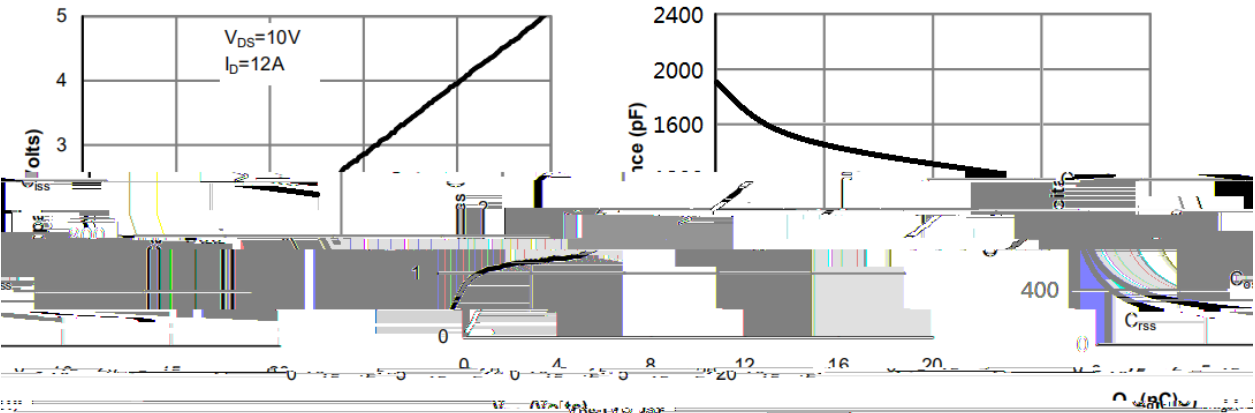


Figure 7: Gate Charge Characteristics

Figure 8: Capacitance Characteristics

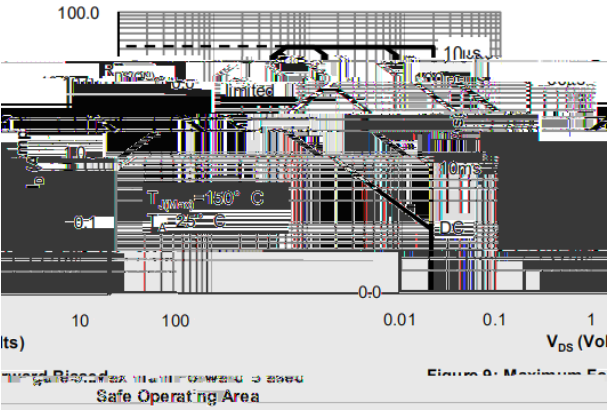


Figure 9: Maximum Safe Operating Area

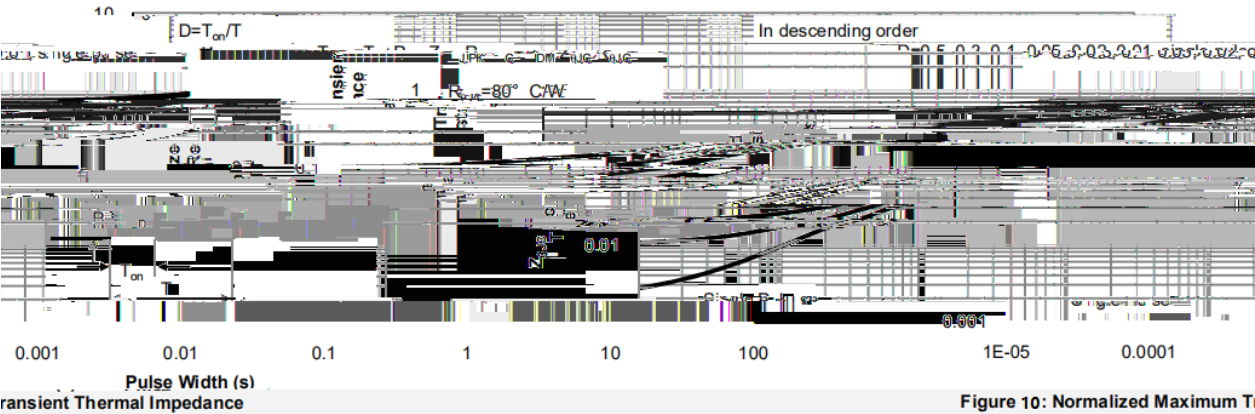
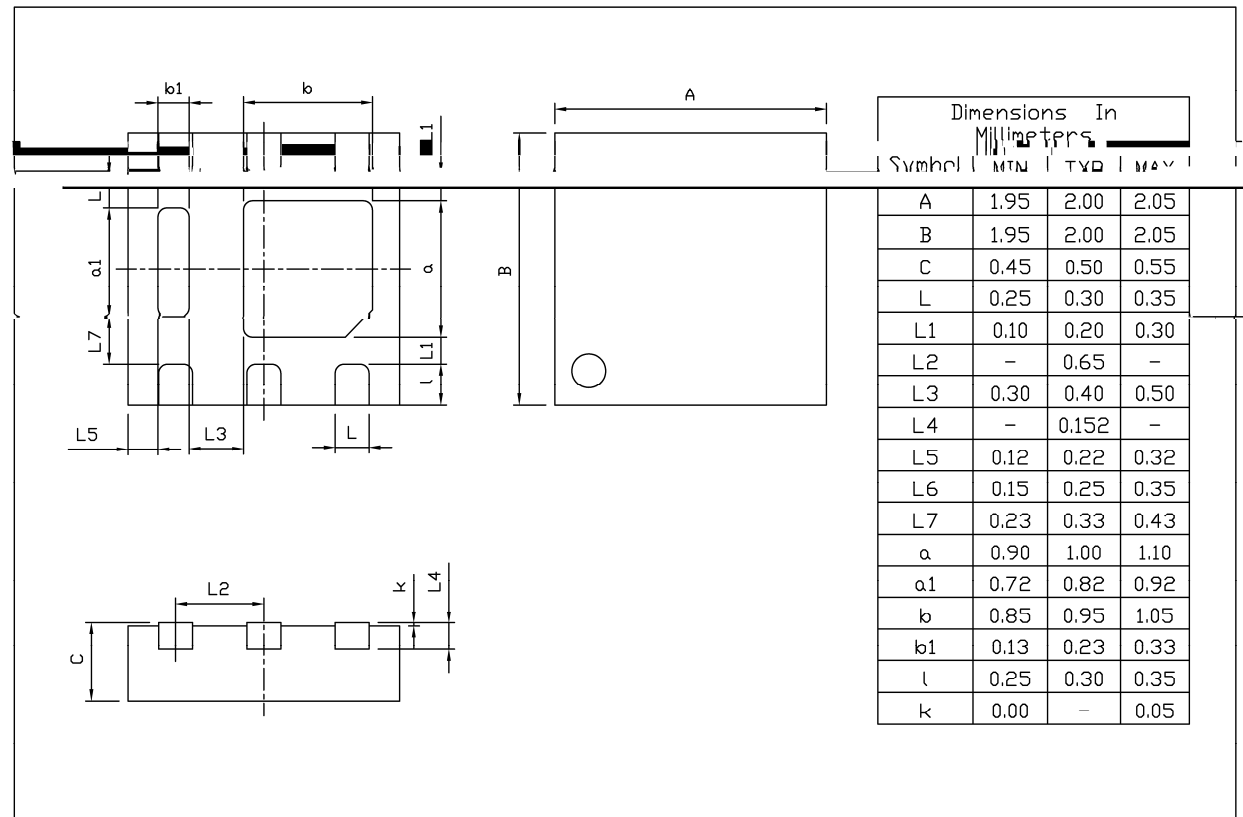


Figure 10: Normalized Maximum Thermal Impedance

/ Package Dimensions

DFN2 X2B-6L-0.5

Unit:mm



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