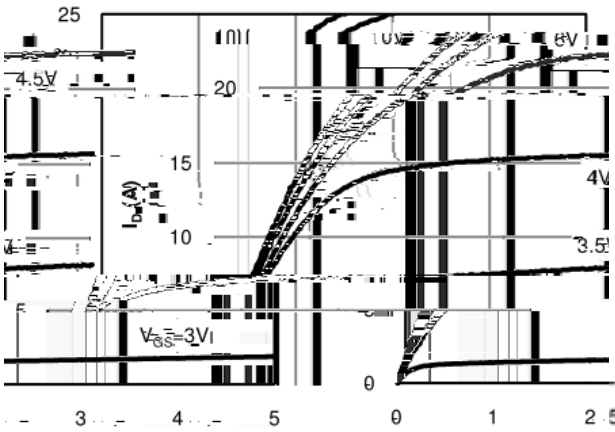
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	100	V
Drain Current		I_D(Tc=25)	15	A
Drain Current		I_D(Tc=100)	10	A
Drain Current - Pulsed*		I_{DM}	45	A
Gate-Source Voltage		V_{GS}	±20	V
Single Pulsed Avalanche Energy		E_{AS}	90	mJ
Avalanche Current		I_{AS}	9.1	A
Power Dissipation		P_D(Tc=25)	39	W
Operating and Storage Temperature Range		T_j T_{stg}	-55 150	
Junction-to-Ambient	t ≤ 10s	$R_{\theta JA}$	20	/W
Junction-to-Ambient	Steady-State		50	
Junction-to-Case	Steady-State	$R_{\theta JC}$	3.2	

*Repetitive rating; pulse width limited by max. junction temperature.

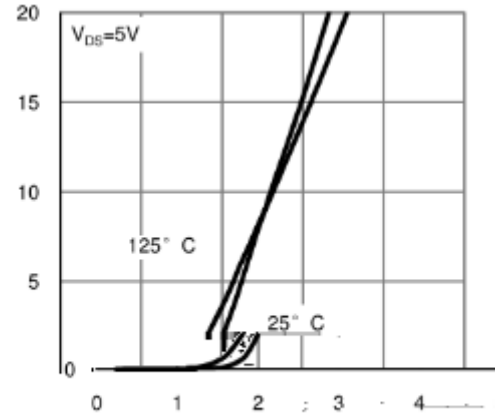
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250εA	100			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=100V V_{GS}=0V			1.0	εA
		T_J=125			50	
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250εA	1	1.9	3	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=8.5A		75	90	mq
		T_J=125		142		
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=15A		1.0	1.2	V
Gate resistance	R_g	V_{GS}=0V V_{DS}=0V f=1MHz		1.3		q
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V f=1.0MHz		250		pF
Output Capacitance	C_{oss}			125		pF
Reverse Transfer Capacitance	C_{rss}			20		pF
Total Gate Charge(10V)	Q_g	V_{GS}=10V V_{DS}=50V I_D=5A		5.8		nC
Total Gate Charge(4.5V)	Q_g			2.8		nC
Gate Source Charge	Q_{gs}			1.1		nC
Gate Drain Charge	Q_{gd}			1.2		nC
Turn-On Delay Time	t					



V_{DS} (Volts)

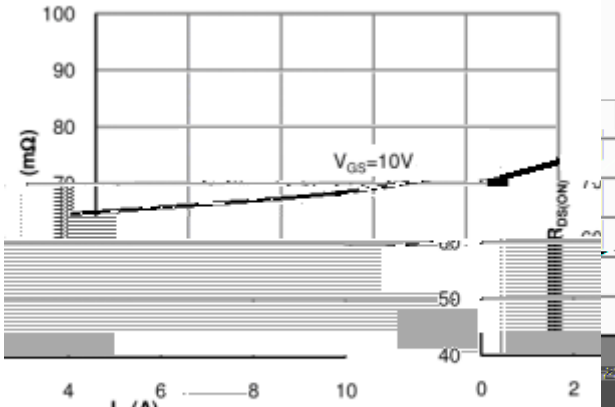
Fig 1: On-Regio

n Characteristics



V_{GS}(Volts)

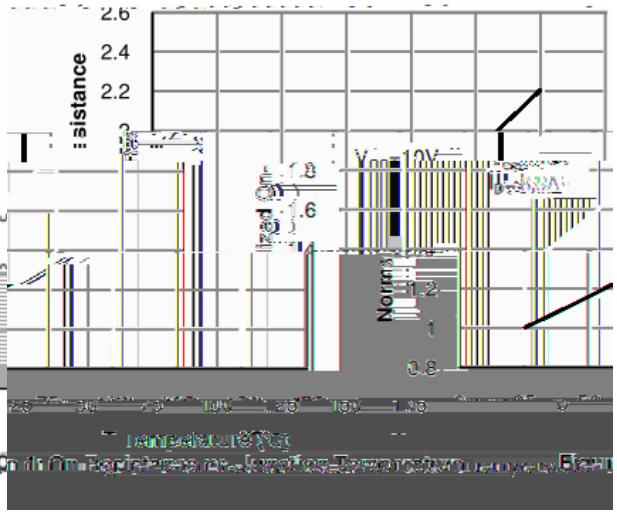
Figure 2: Transfer Characteristics

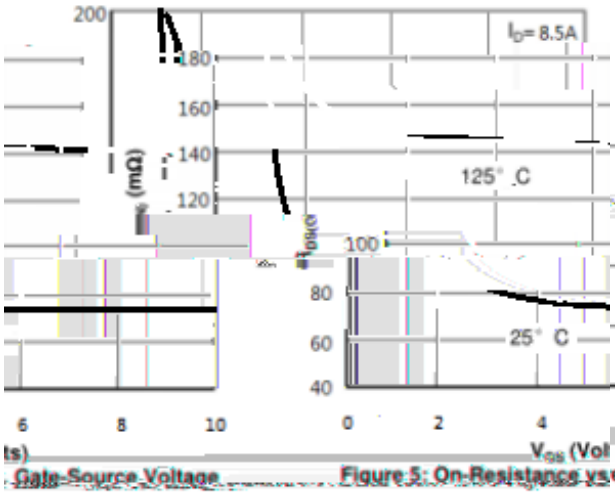


n-Resistance vs. Drain Current and Gate

Voltage

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



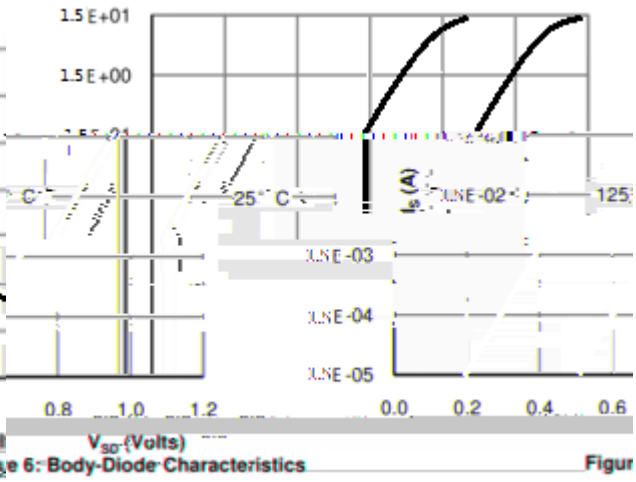


ts)

V_{DS} (Vol

Gate-Source Voltage

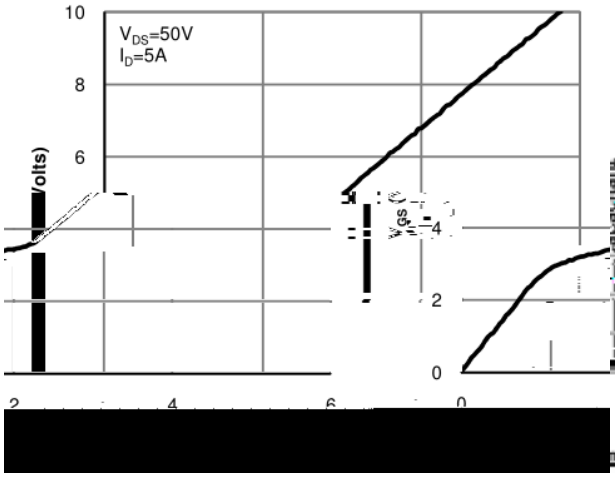
Figure 5: On-Resistance vs

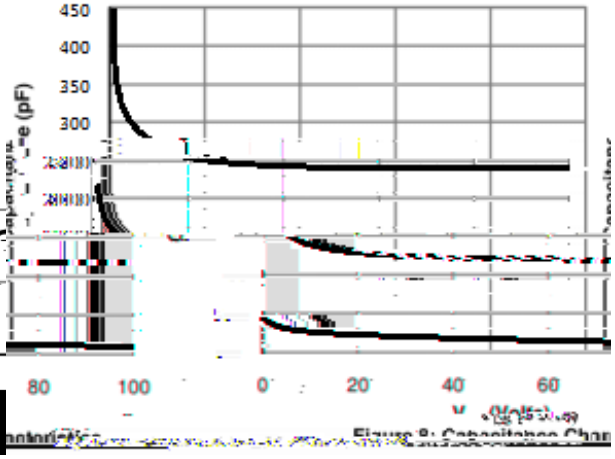


V_{SD} (Volts)

e 6: Body-Diode Characteristics

Figur





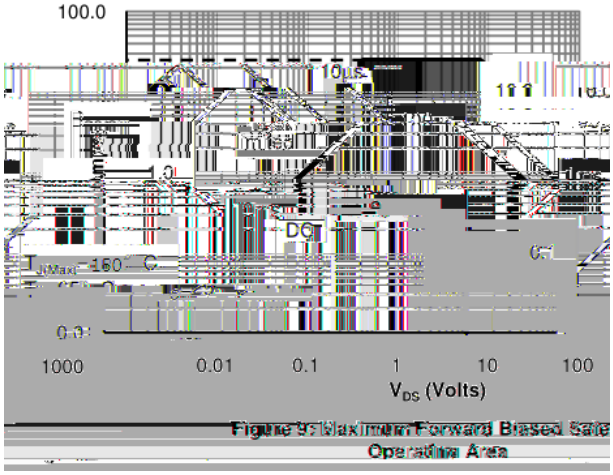


Figure 9: Maximum Forward Biased Safe Operating Area

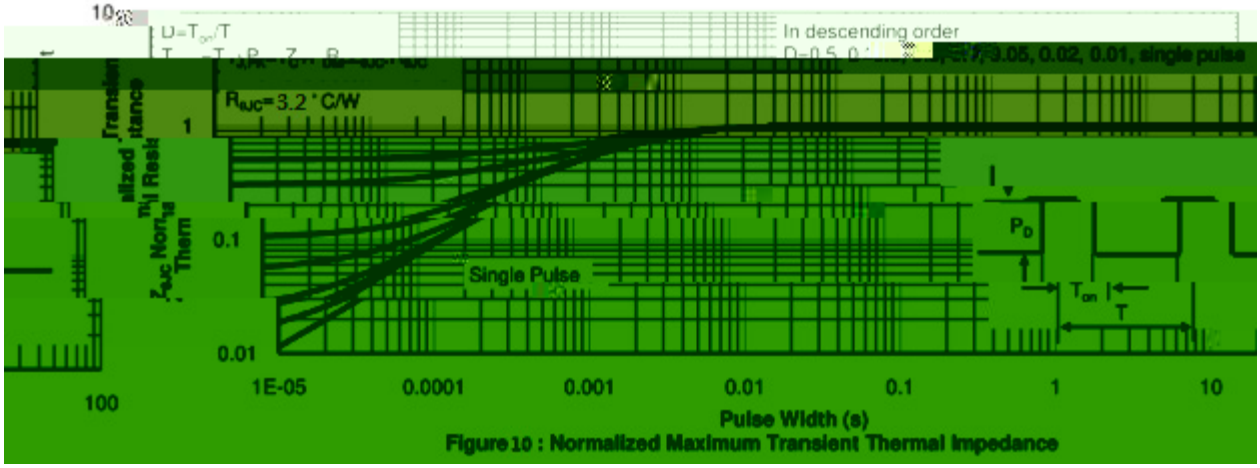
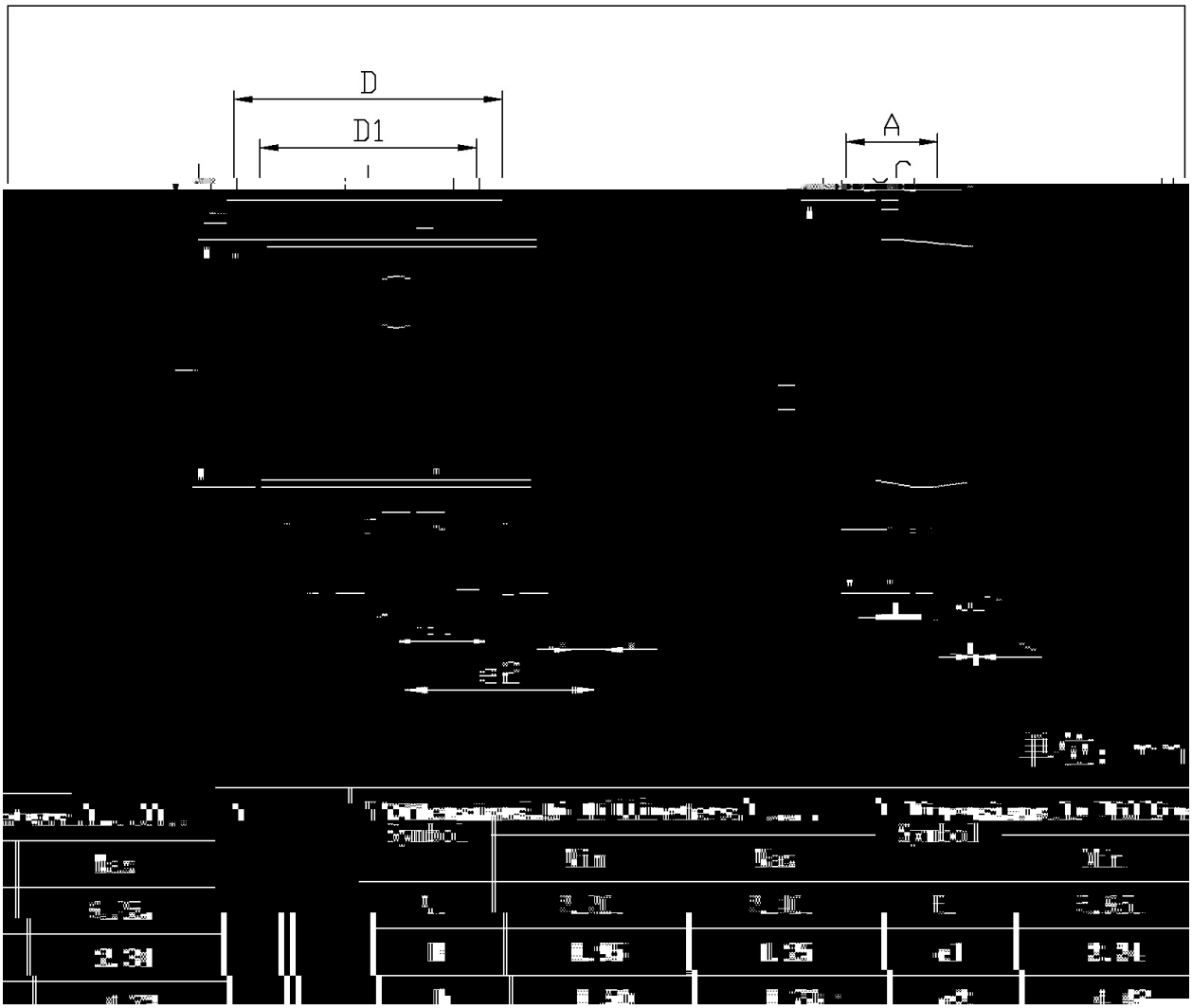


Figure 10 : Normalized Maximum Transient Thermal Impedance



Symbol	Min	Max	Symbol	Min
D	5.45	5.65	d	2.34

0.00	0.10	D1	5.10	5.50	K

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