TO-220 ꓜꓜꓮ N ꝸ ʃ ѽ Ƹ ᒣ
N-CHANNEL MOSFET in a TO-220 Plastic Package.

V_{DS}=60V I_D

ώ ̈ Ξ ̊Ą / Absolute Maximum Ratings(Ta=25 ɹ)

v ̈Ω Parameter		ϒ N Symbol	̈Ω Ö Rating	D Ꮋ Unit
Drain-Source Voltage		V_{DSS}	60	V
Drain Current		I_D(Tc=25)	106	A
Pulsed Drain Current		I_{DM}	376	A
Gate-Source Voltage		V_{GS}	20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	720	mJ
Avalanche Current		I_{AS}	41	A
Total Power Dissipation		P_D(Tc=25)	150	W
Junction and Storage Temperature Range		T_J,T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	Steady-State	$R_{\theta JA}$	62.5	ɬ /W
Thermal Resistance-Junction to Case	Steady-State	$R_{\theta JC}$	0.83	

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v ̈Ω Parameter	ϒ N Symbol	╨ ː ̊ ţ Test Conditions	ώ ṇ Ö Min	Ɛ ʒ Ö Typ	ώ ᶻ Ö Max	D Ꮋ Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=250uA, V_{GS}=0V	60	70		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=60V, V_{GS}=0V			1.0	uA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V, V_{GS}= ±20V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=250uA	2.0	2.9	4.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=10V, I_D=20A		5.7	7	mƑ
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=6V, I_D=10A		6.2	12	mƑ
Diode Forward Voltage	V_{SD}	I_S=1A, V_{GS}=0V			1.2	V
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V f=1.0MHz		5590		pF
Output Capacitance	C_{oss}			295		
Reverse Transfer Capacitance	C_{rss}			185		
Gate resistance	R_g	V_{GS}=0V V_{DS}=0V f=1MHz		0.77		Ω
Total Gate Charge	Q_g	V_{GS}=10V, V_{DS}=30V, I_D=20A		53		nC
Gate Source Charge	Q_{gs}			17		
Gate Drain Charge	Q_{gd}			5		

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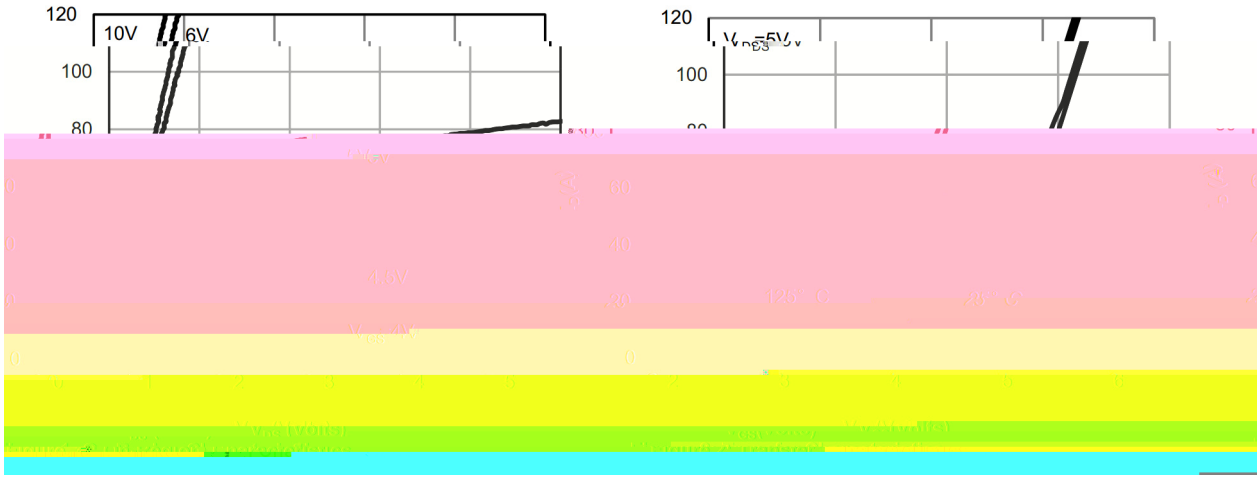

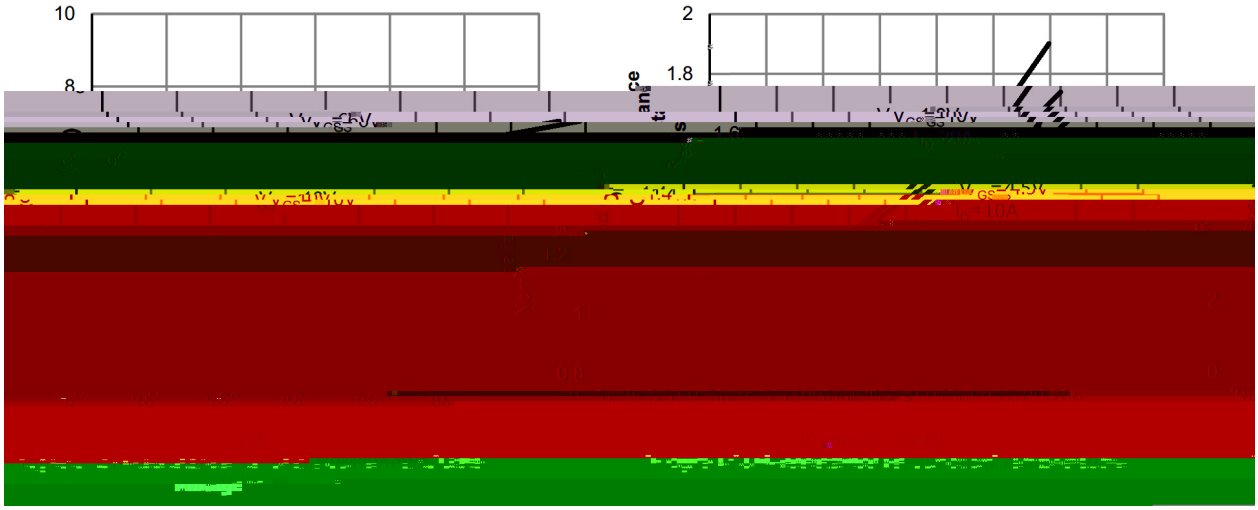

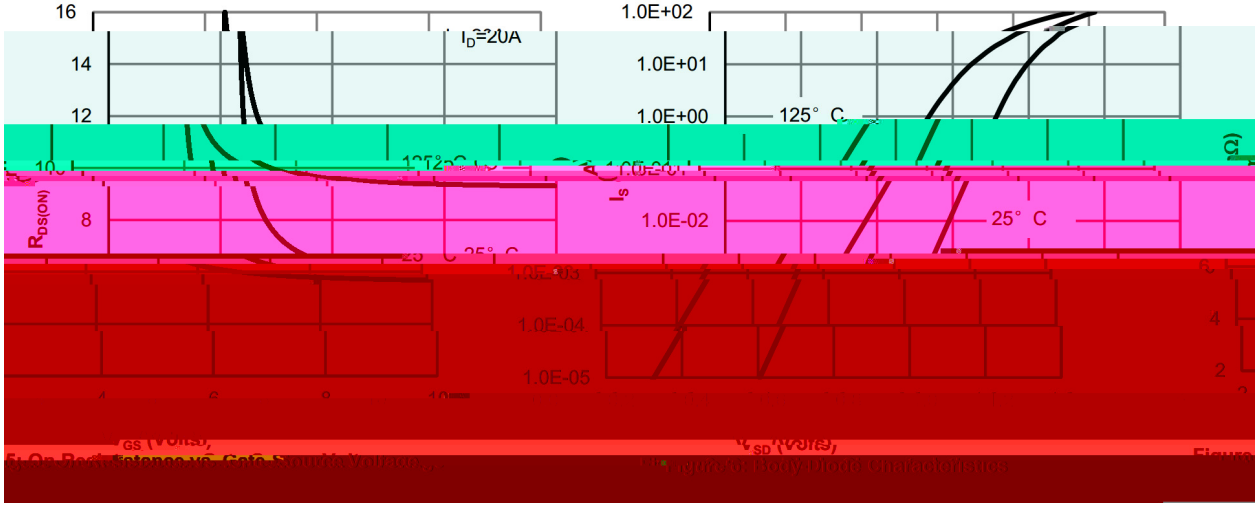

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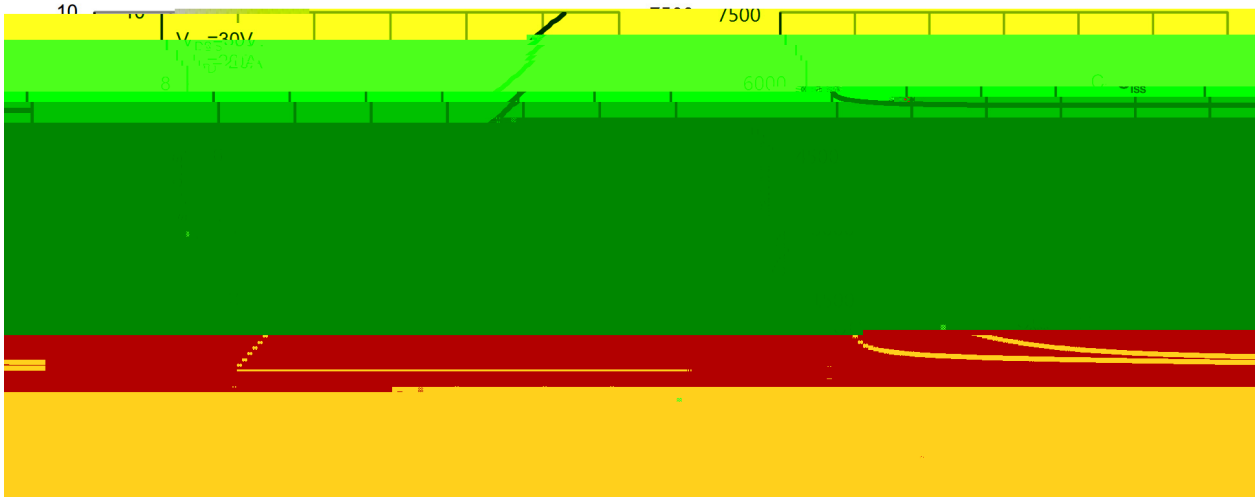

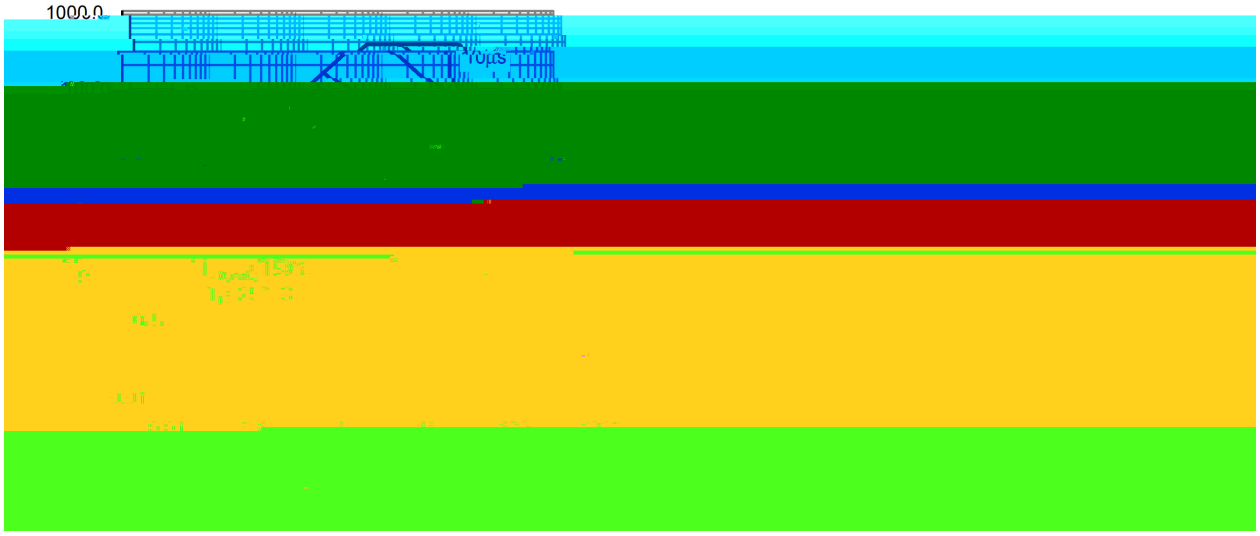

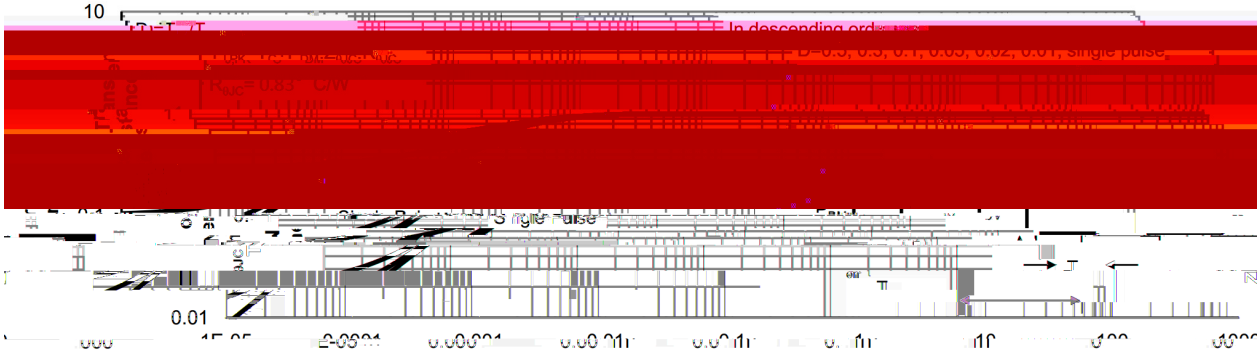

ıt Thermal Impedance

Figure 10: Normalized Maximum Transien

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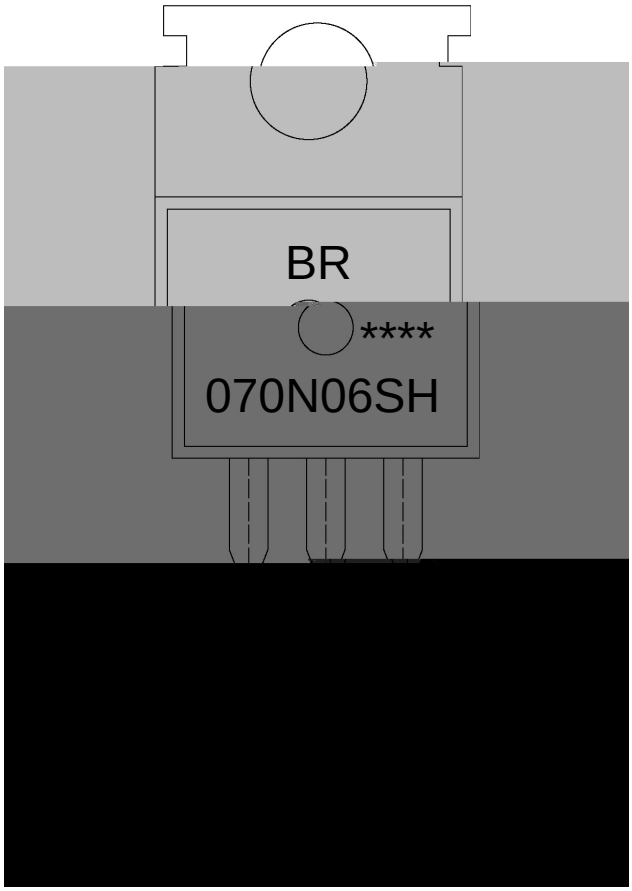

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Note:

BR: Company Code

070N06SH: Product Type Code

****: Lot No. Code, code change with Lot No

BRCS070N06SHRA