Absolute Maximum Ratings T_C =25

Parameter	**Symbol**	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	$I_{D@}$TC=25℃	36	A
	$I_{D@}$TC=75℃	27	A
	$I_{D@}$TC=100℃	22	A
Pulsed Drain Current ①	I_{DM}	72	A
Total Power Dissipation(TC=25℃)	P_D@TC=25℃	3.6	W
Total Power Dissipation(TA=25℃)	P_D@TA=25℃	0.69	W
Operating Junction Temperature	T_J	-55 to 150	℃
Storage Temperature	T_{STG}	-55 to 150	℃
Single Pulse Avalanche Energy	E_{A98} ref56.64 2		

Body Diode Reverse Recovery Charge	Qrr	IF=20A, di/dt=100A/μs		7		nC

N Channel characteristics curve

Fig.1 Power Dissipation Derating Curve

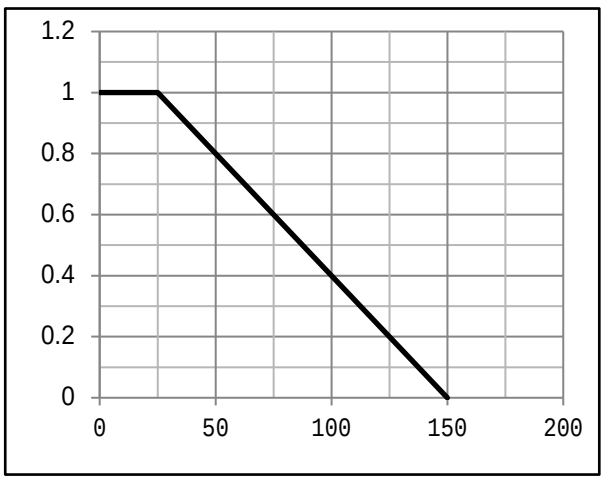


Fig.2 Typical output Characteristics

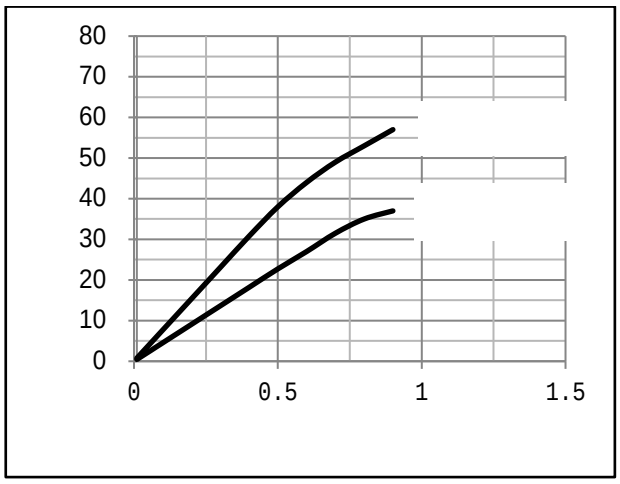


Fig.3 Threshold Voltage V.S Junction Temperature

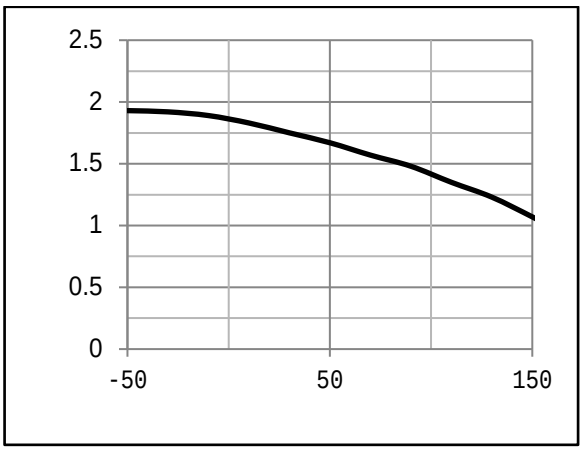
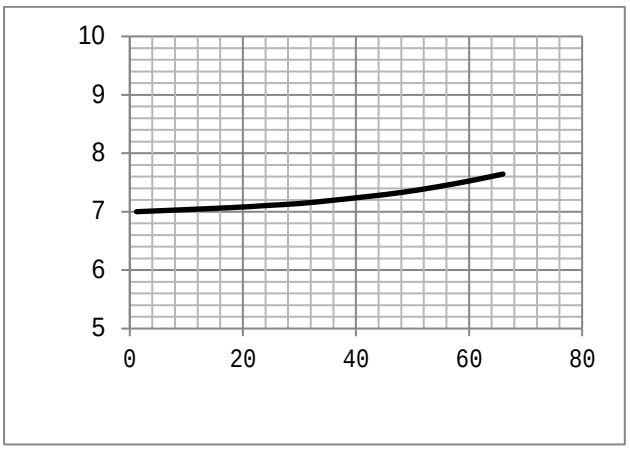
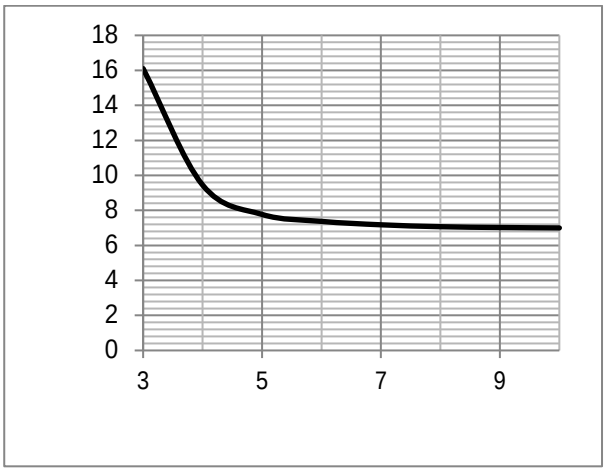
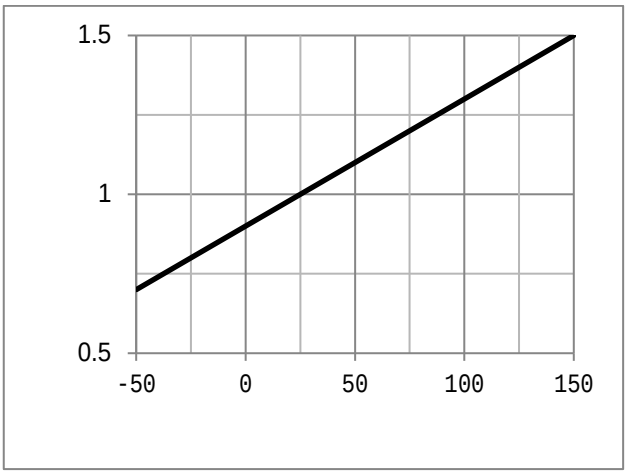


Fig.4 Resistance V.S Drain Current







Test Circuit

Fig.1 Switching Time Measurement Circuit

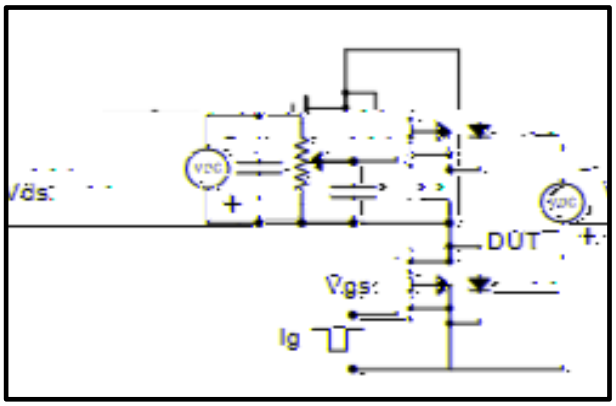


Fig.2 Gate Charge Waveform

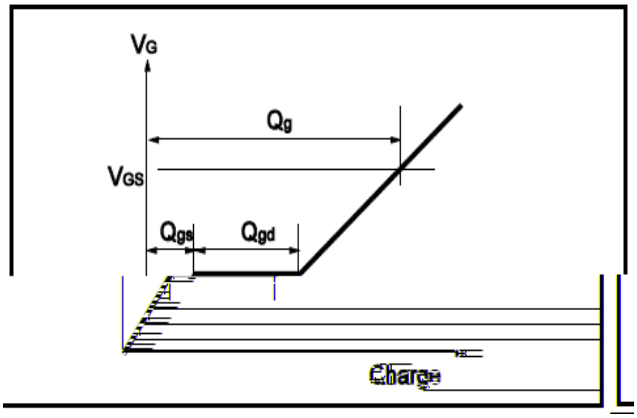


Fig.3 Switching Time Measurement Circuit

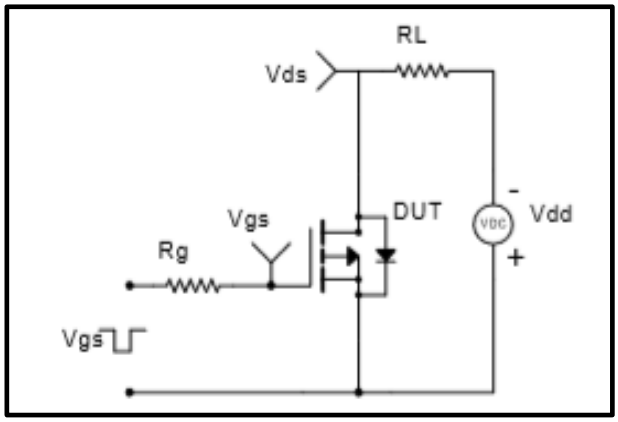


Fig.4 Gate Charge Waveform

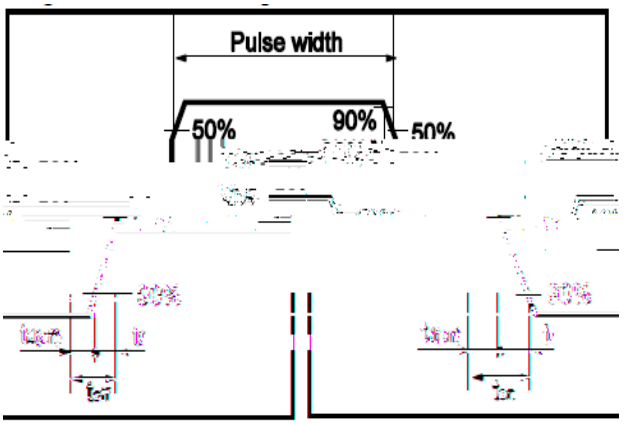


Fig.5 Avalanche Measurement Circuit

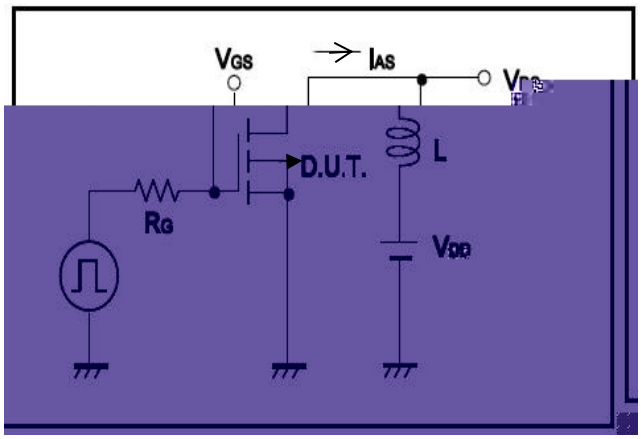
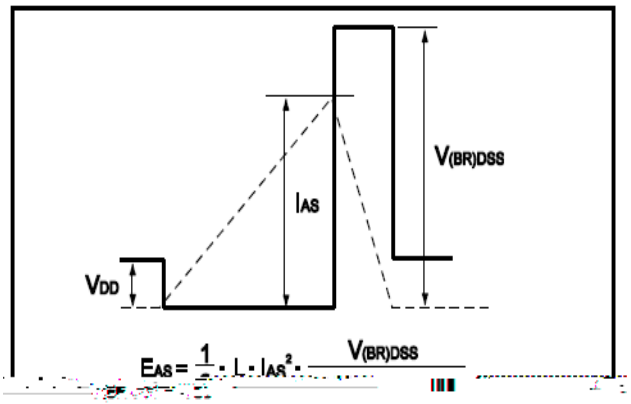


Fig.6 Avalanche Waveform



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