

 $T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_{D@T_C=25}$	175	A
	$I_{D@T_C=75}$	133	A
	$I_{D@T_C=100}$	110	A
Pulsed Drain Current	I_{DM}	525	A
Total Power Dissipation	$P_D@T_C=25$	104	W
Total Power Dissipation	$P_D@T_A=25$	3.1	W
Operating Junction Temperature	T_J	-55 to 175	
Storage Temperature	T_{STG}	-55 to 175	
Single Pulse Avalanche Energy	E_{AS}		



Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R _{thJC}	-	-	1.2	° C/W
Thermal resistance, junction - ambient	R _{thJA}	-	-	40	° C/W
Soldering temperature, wave soldering for 10s	T _{sold}	-	-	265	° C

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown V _{DS(sat)} (I _{DS})						

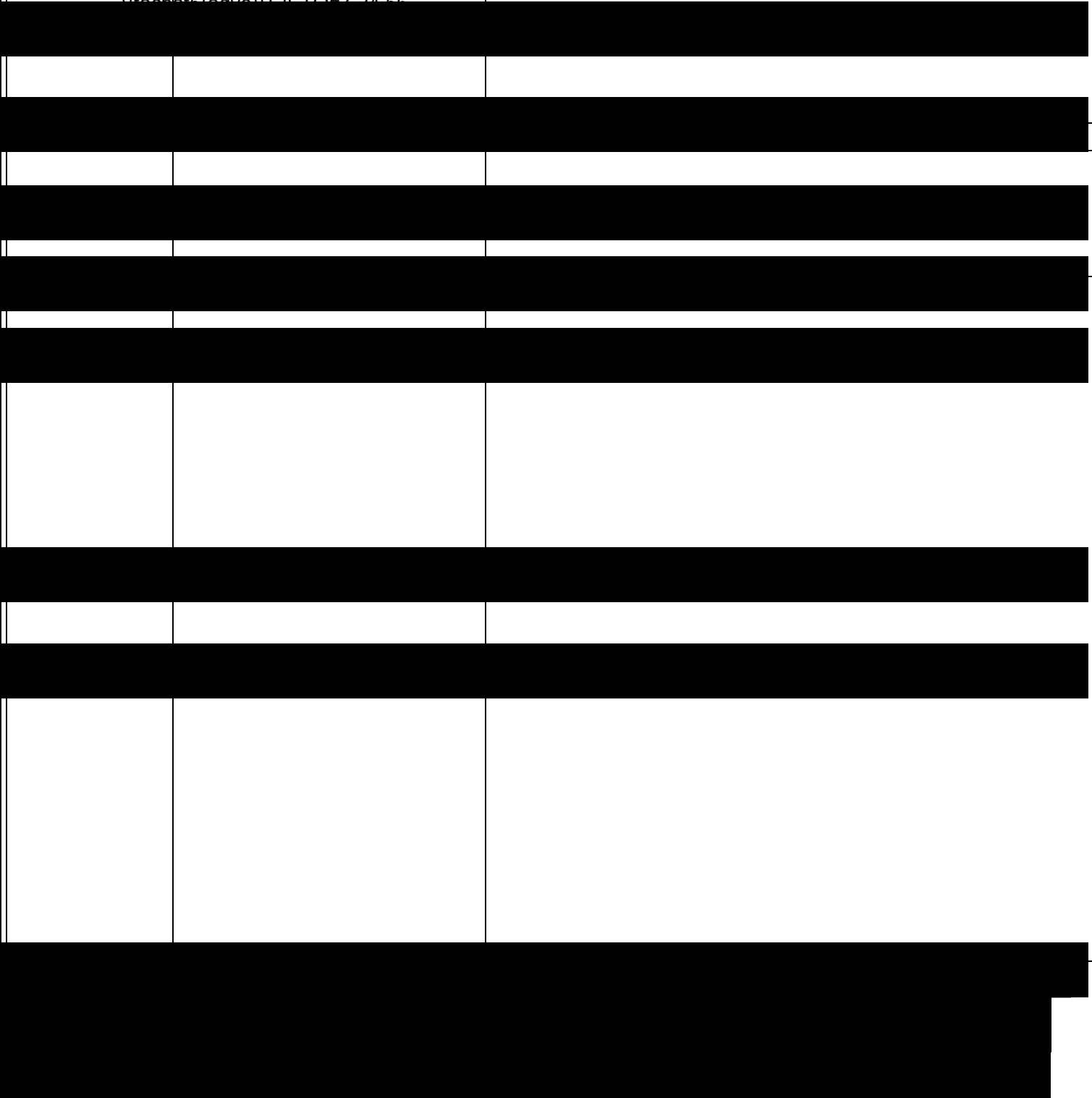


Fig.1 Gate-Charge Characteristics

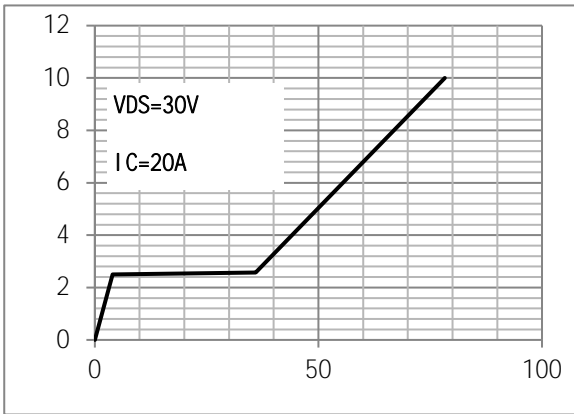


Fig.2 Capacitance Characteristics

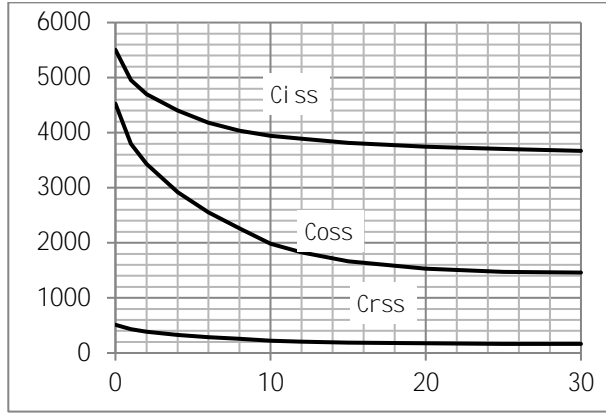


Fig.3 Power Dissipation

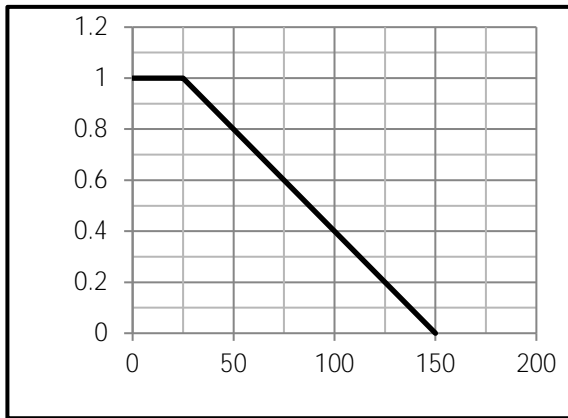


Fig.4 Typical output Characteristics

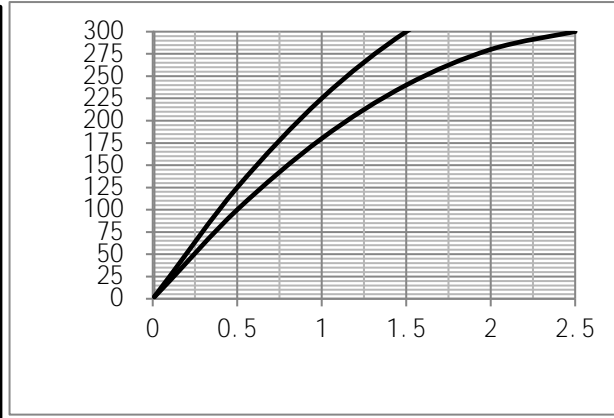


Fig.5 Threshold Voltage V.S Junction Temperature

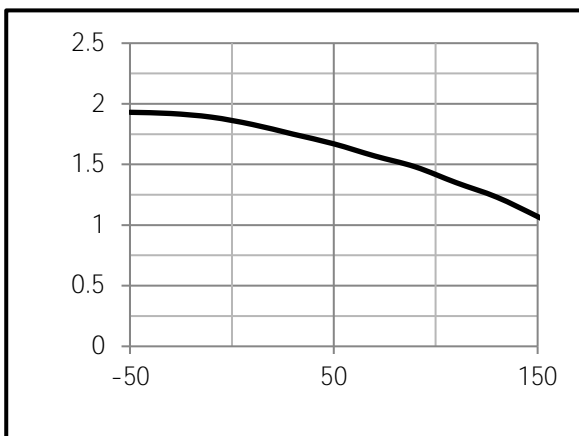
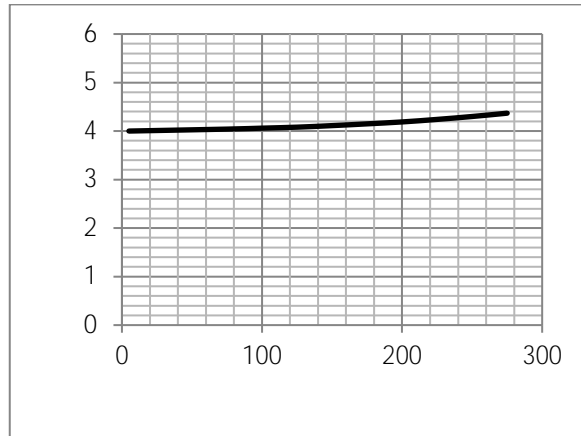


Fig.6 Resistance V.S Drain Current



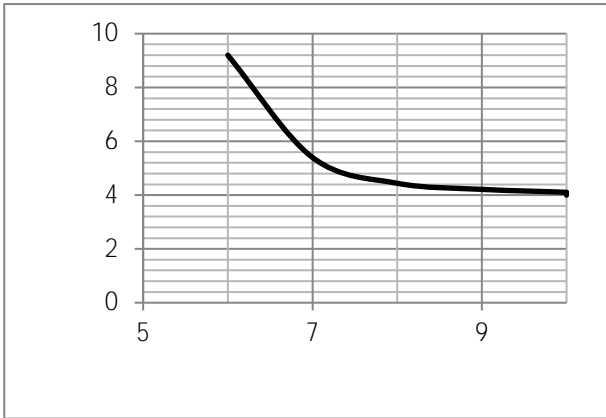


Fig.9 SOA Maximum Safe Operating Area

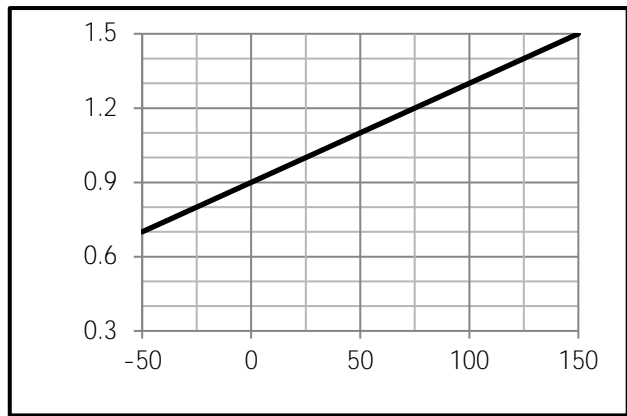


Fig.10 I_D -Junction Temperature

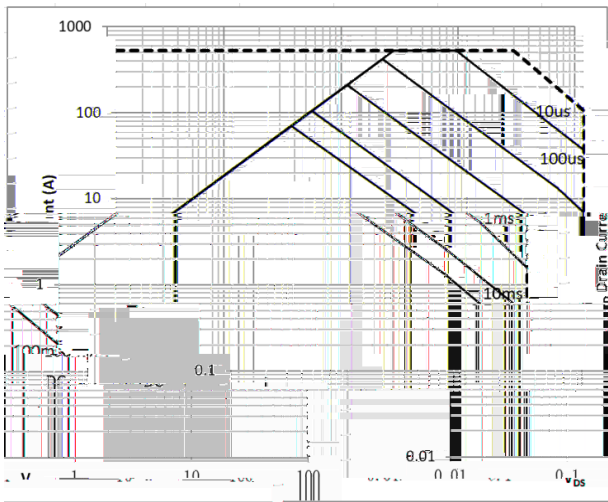


Fig.11 Switching Time Measurement Circuit

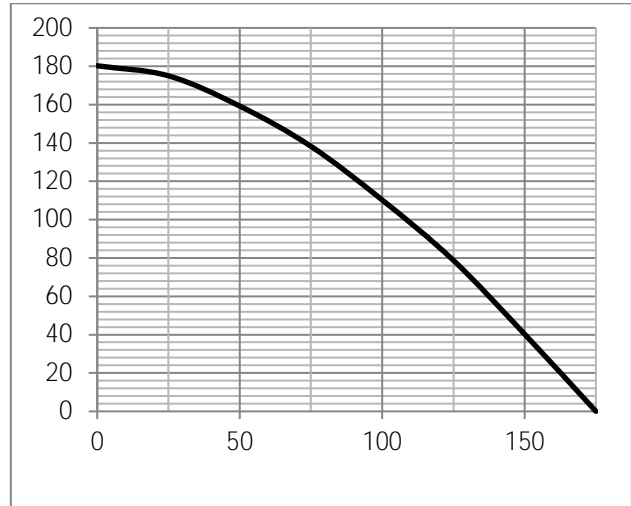


Fig.12 Gate Charge Waveform

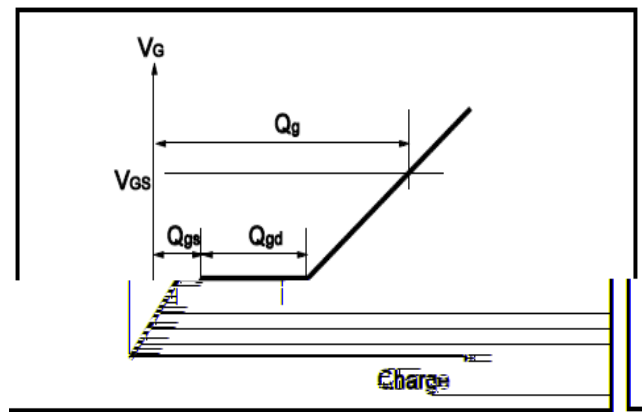
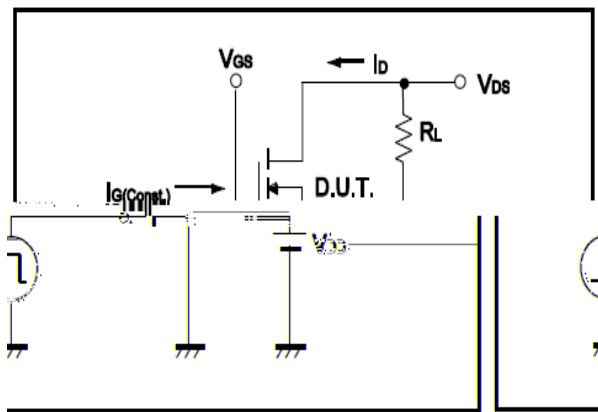


Fig.13 Switching Time Measurement Circuit

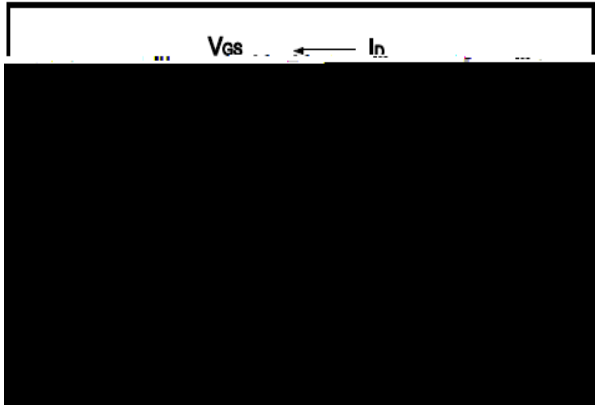


Fig.14 Gate Charge Waveform

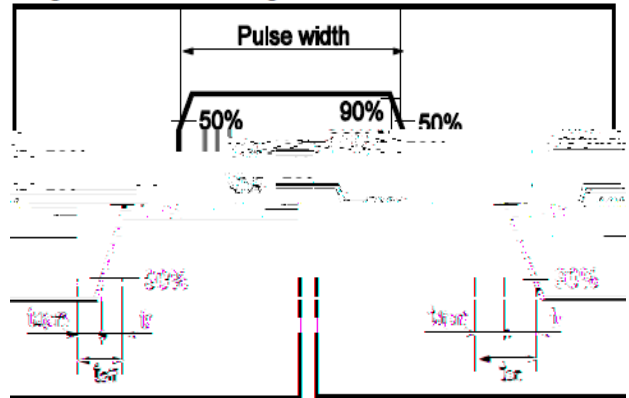


Fig.15 Avalanche Measurement Circuit

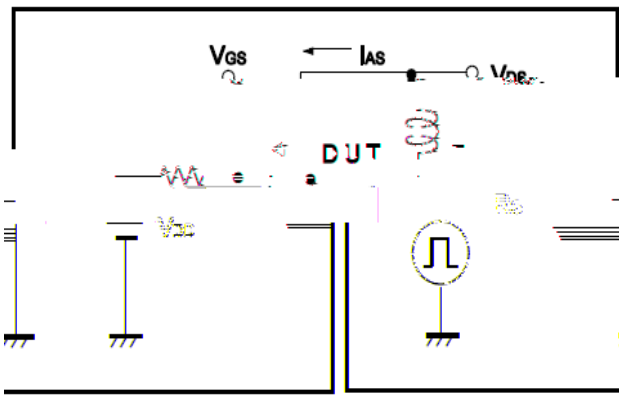


Fig.16 Avalanche Waveform

