

N Channel Absolute Maximum Ratings $T_c = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	7.0	A
Pulsed Drain Current	I_{DM}	21	A
Total Power Dissipation	$P_D@TC=25^\circ C$	3.4	W
Total Power Dissipation	$P_D@TA=25^\circ C$	0.69	W
Operating Junction Temperature	T_J	-55 to 150	$^\circ C$
Storage Temperature	T_{STG}	-55 to 150	

P Channel Absolute Maximum Ratings $T_c = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-100	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	-2.0	A
Pulsed Drain Current ^①	I_{DM}	-6	A
Total Power Dissipation	$P_D@TC=25^\circ C$	3.4	W
Total Power Dissipation	$P_D@TA=25^\circ C$	0.69	W
Operating Junction Temperature	T_J	-55 to 150	$^\circ C$
Storage Temperature	T_{STG}	-55 to 150	$^\circ C$

Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	56	$^\circ C/W$
Thermal resistance, junction - ambient	R_{thJA}	-	-	180	$^\circ C/W$
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	$^\circ C$



N Channel characteristics curve

Fig.1



Test Circuit

Fig.1 Switching Time Measurement Circuit

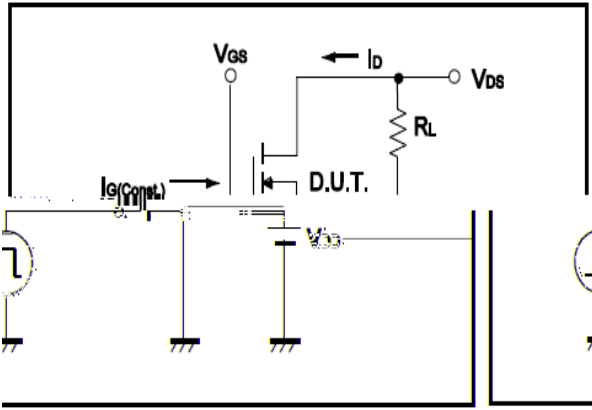


Fig.2 Gate Charge Waveform

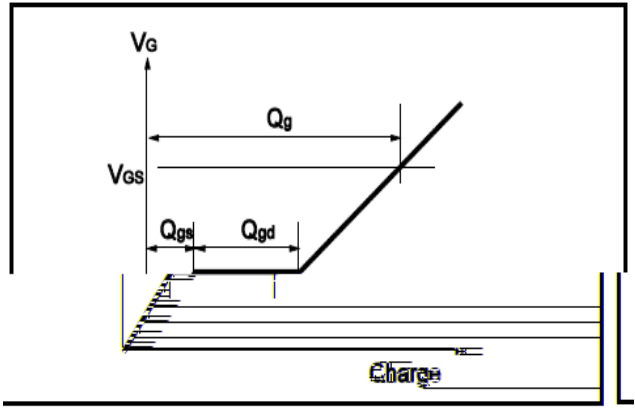


Fig.3 Switching Time Measurement Circuit

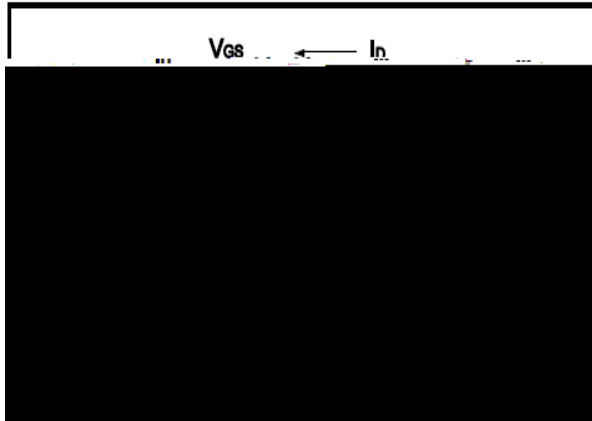


Fig.4 Gate Charge Waveform

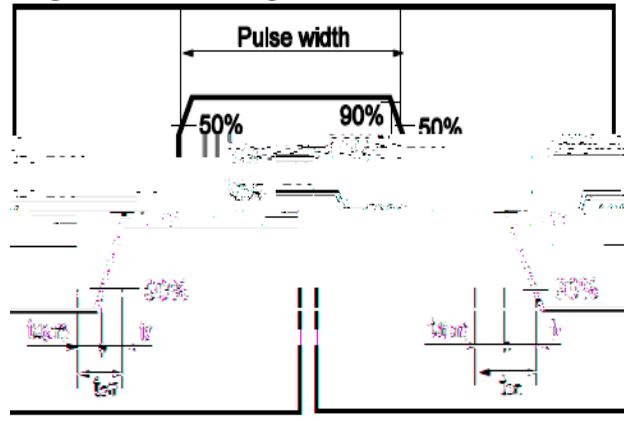


Fig.5 Avalanche Measurement Circuit

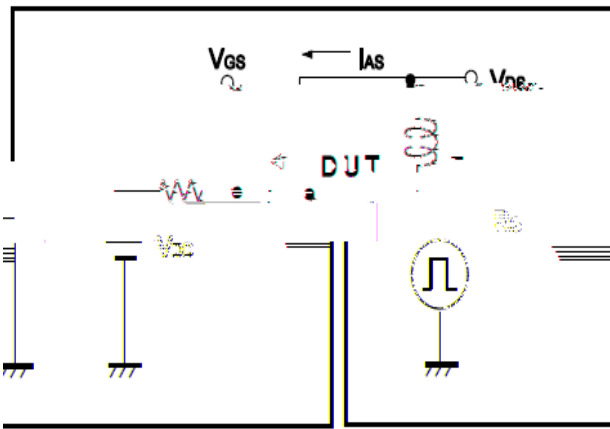


Fig.6 Avalanche Waveform

