T_C =25 Q1

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	12	A
	$I_{D@}$TC=75	9.1	A
	$I_{D@}$TC=100	7.5	A
Pulsed Drain Current	I_{DM}	36	A
Total Power Dissipation(TC=25)	P_D@TC=25	17	W
Total Power Dissipation(TA=25)	P_D@TA=25	0.9	W
Operating Junction Temperature			

(Q2)

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	C_{iss}	f = 1MHz	-	1150	-	pF
Output capacitance	C_{oss}		-	235	-	
Reverse transfer capacitance	C_{rss}		-	120	-	

Gate Charge characteristics(T_a = 25)(Q2)

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge	Q_g	V_{DD} = 25V	-	12	-	nC
Gate - Source charge	Q_{gs}	I_D = 5A	-	4	-	
Gate - Drain charge	Q_{gd}	V_{GS} = 10V	-	6	-	

Note: ;

characteristics curve(Q1)

Fig.1 Power Dissipation Derating Curve

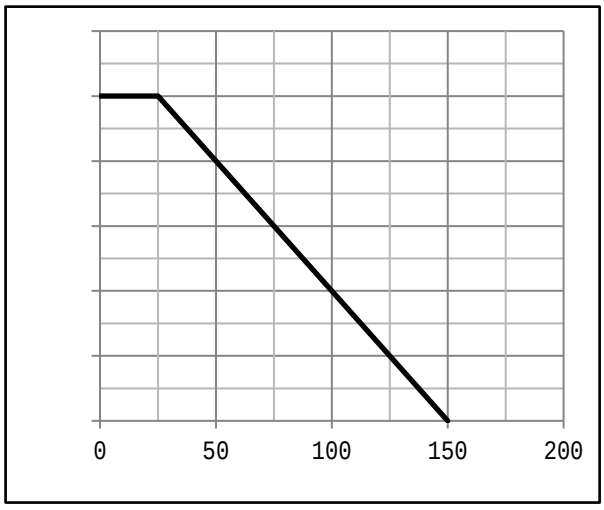


Fig.2 Typical output Characteristics

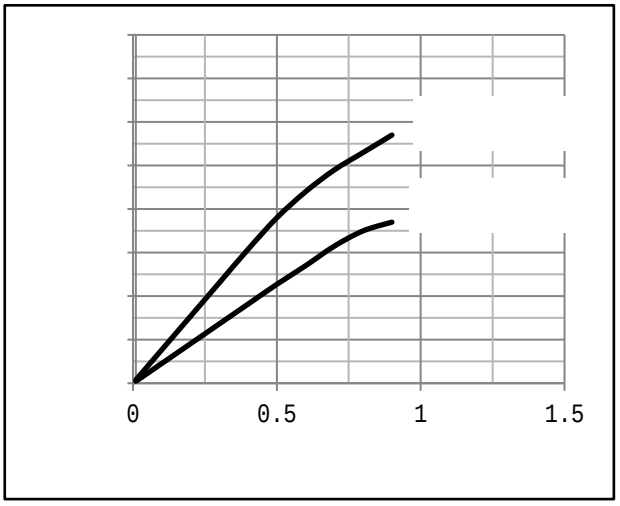


Fig.3 Threshold Voltage V.S Junction Temperature

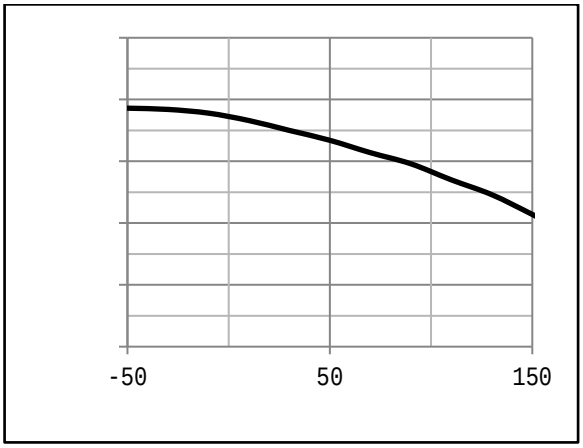
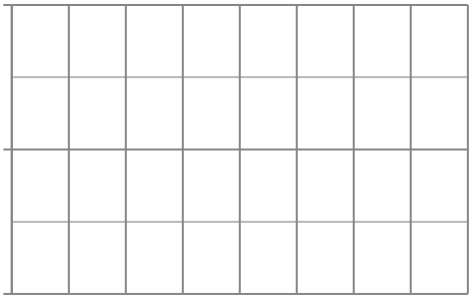


Fig.4 Resistance V.S Drain Current



characteristics curve(Q2)

Fig.1 Power Dissipation

Fig.2 Typical output Characteristics

Fig.3 Threshold Voltage V.S Junction Temperature

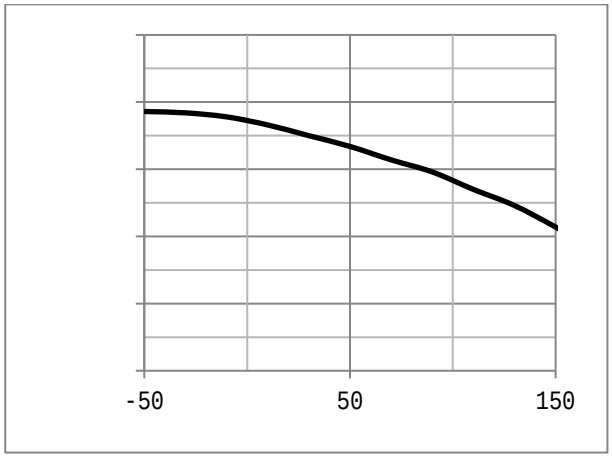
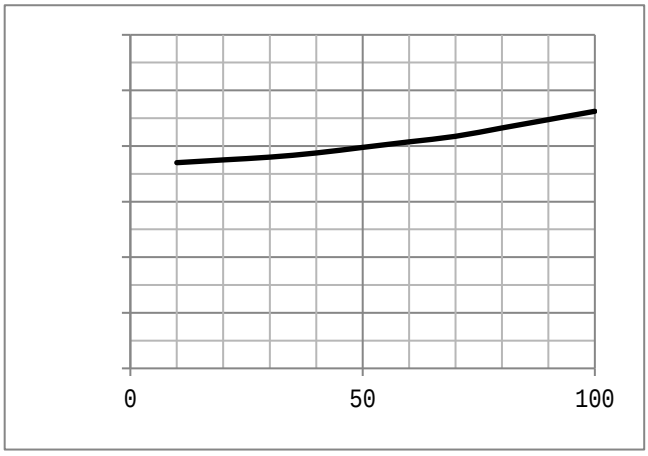
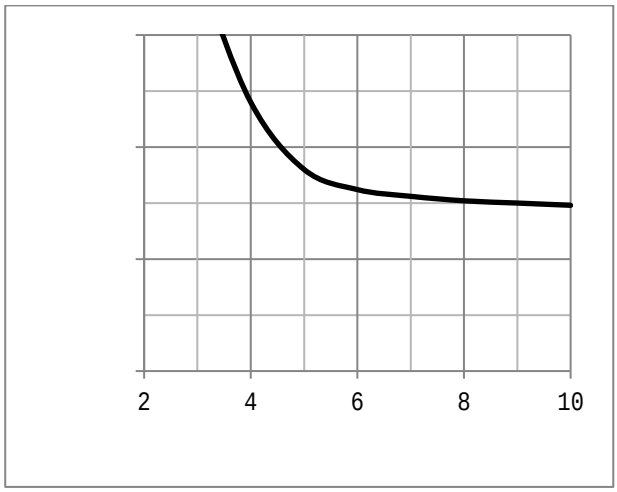
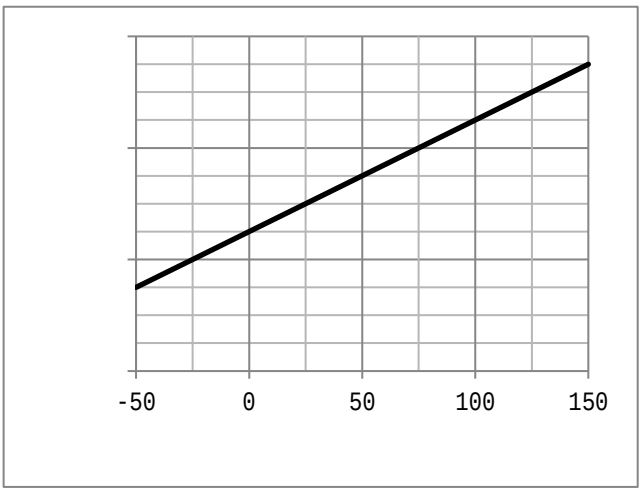


Fig.4 Resistance V.S Drain Current







Test Circuit

Fig.1 Switching Time Measurement Circuit

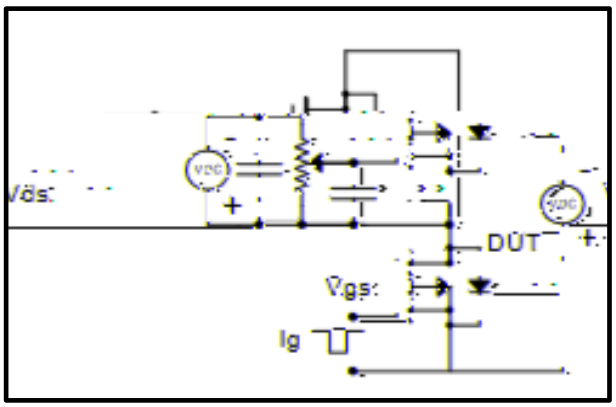


Fig.2 Gate Charge Waveform

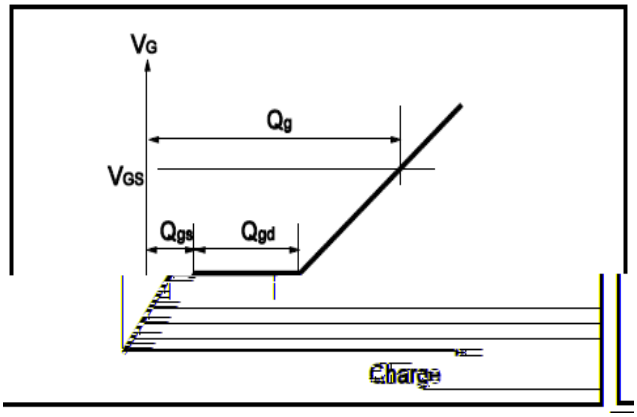


Fig.3 Switching Time Measurement Circuit

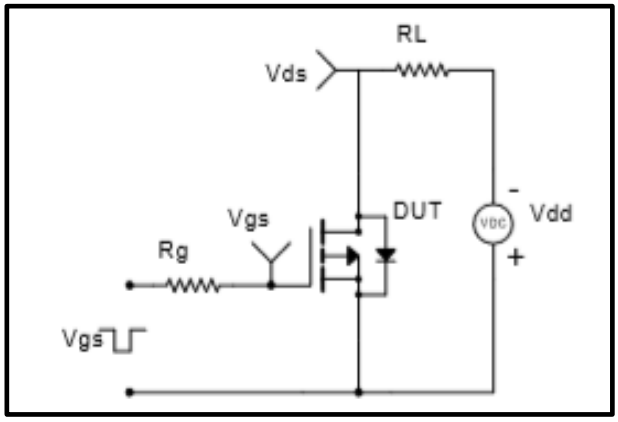


Fig.4 Gate Charge Waveform

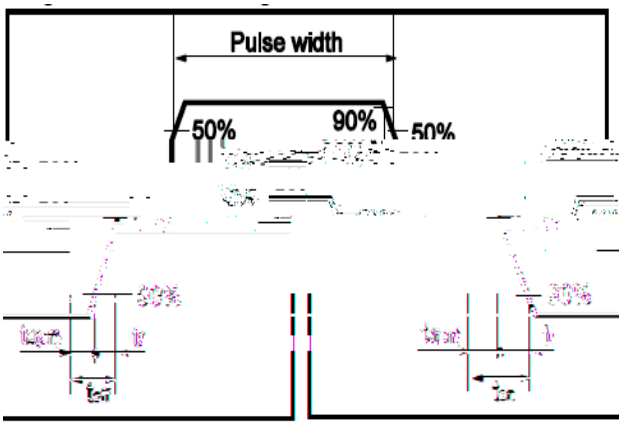


Fig.5 Avalanche Measurement Circuit

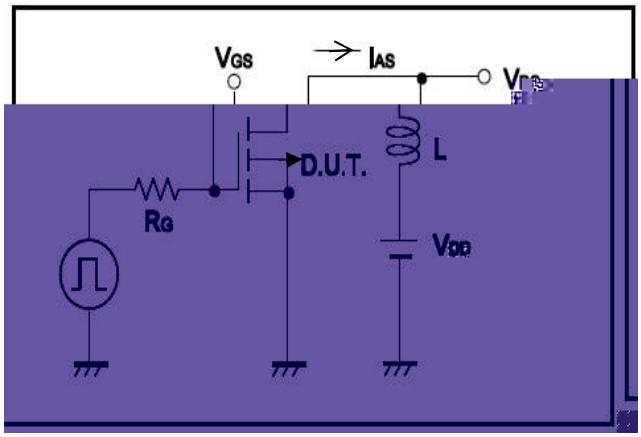
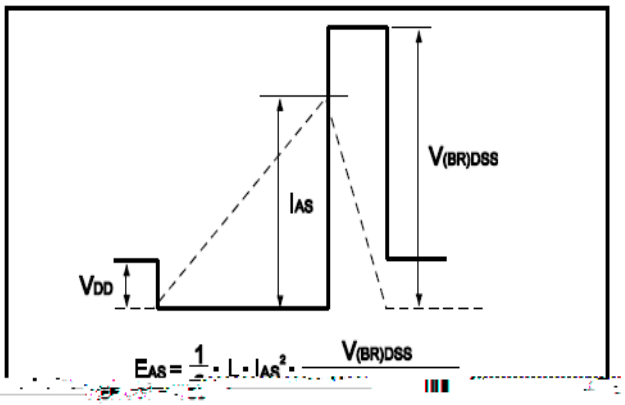


Fig.6 Avalanche Waveform



sions DFN3×3

Unit mm