

**Ordering Information:****Absolute Maximum Ratings**  $T_C = 25$ 

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	45	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_{D@TC=25}$	90	A
	$I_{D@TC=75}$	68	A
	$I_{D@TC=100}$	56	A
Pulsed Drain Current	$I_{DM}$	180	A
Total Power Dissipation	$P_D@TC=25$	70	W
Total Power Dissipation	$P_D@TA=25$	2.5	W
Operating Junction Temperature	$T_J$	-55 to 150	
Storage Temperature	$T_{STG}$	-55 to 150	



Fig.1 Power Dissipation

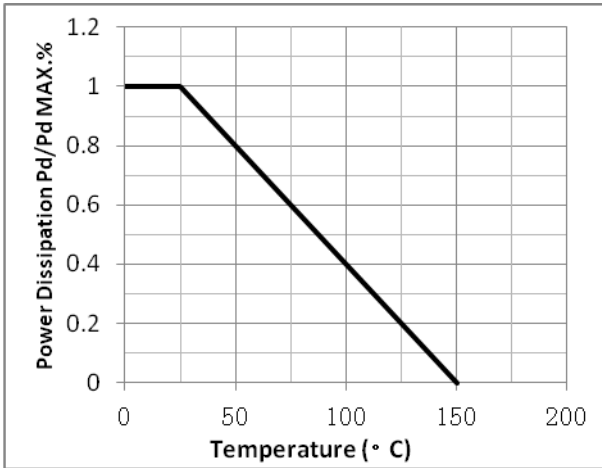


Fig.2 Typical output Characteristics

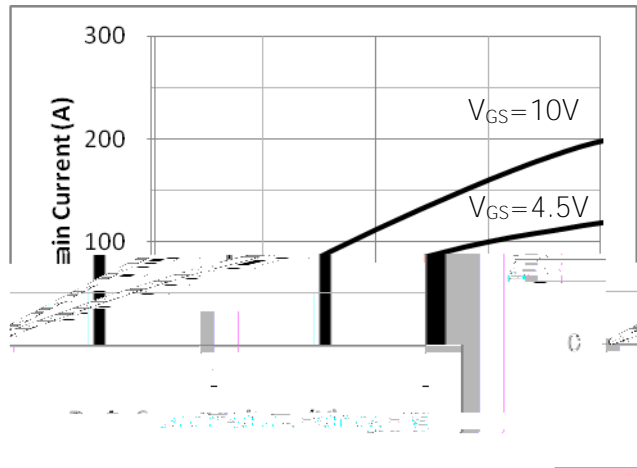


Fig.3 Threshold Voltage V.S Junction Temperature

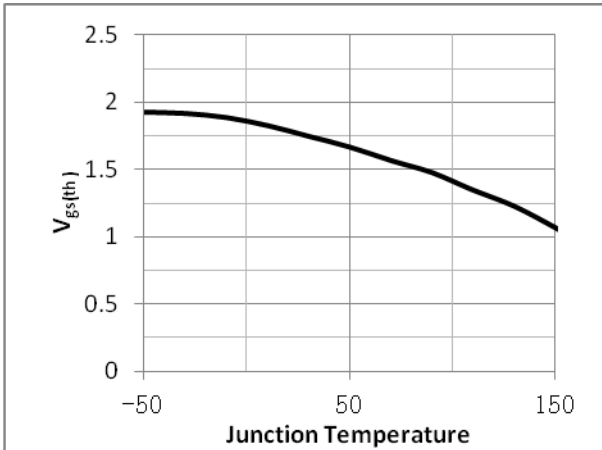


Fig.4 Resistance V.S Drain Current

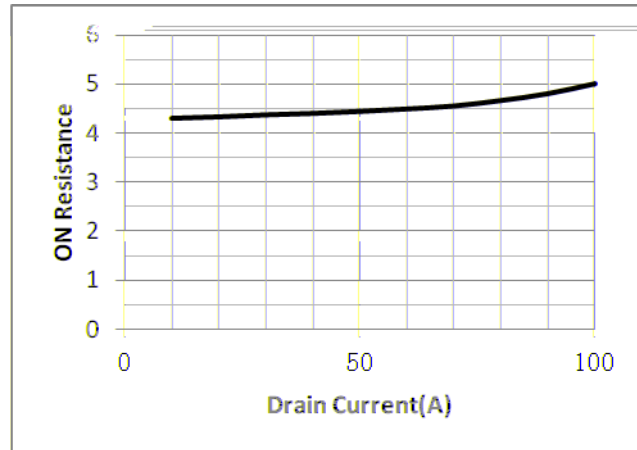


Fig.5 On-Resistance VS Gate Source Voltage

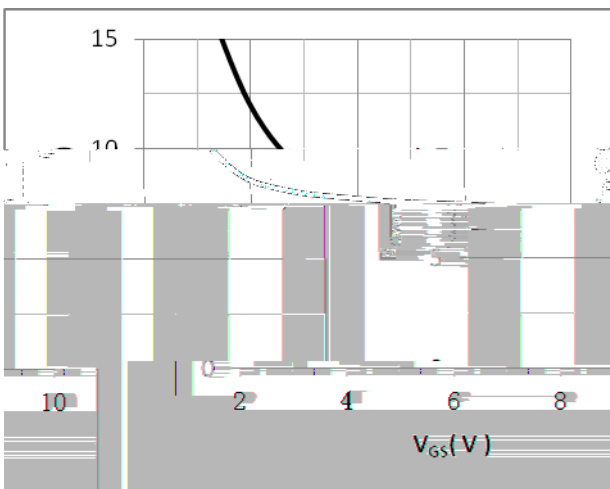


Fig.6 On-Resistance V.S Junction Temperature

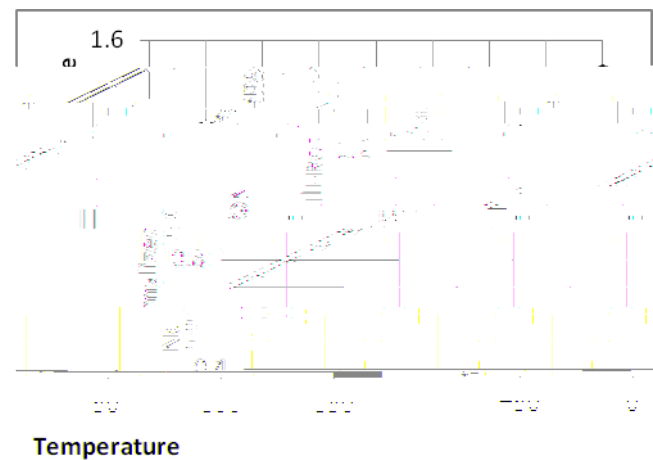


Fig.7 Gate Charge Characteristics

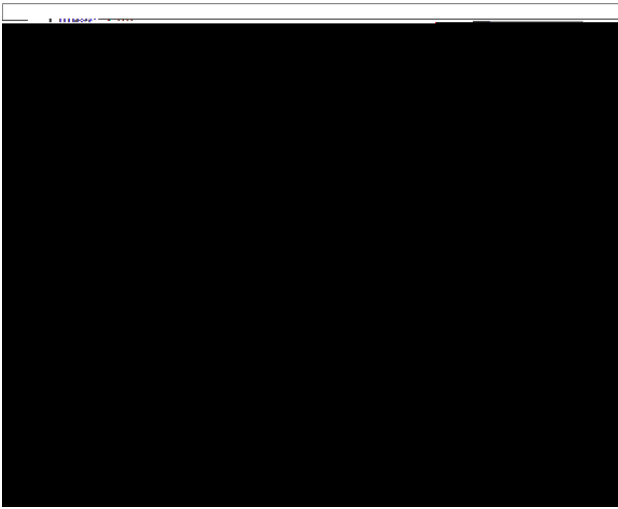


Fig.8 Capacitance vs Vds

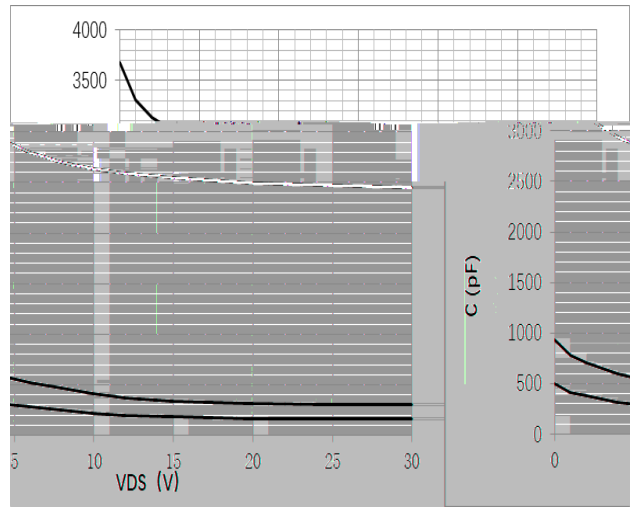


Fig.9 SOA Maximum Safe Operating Area

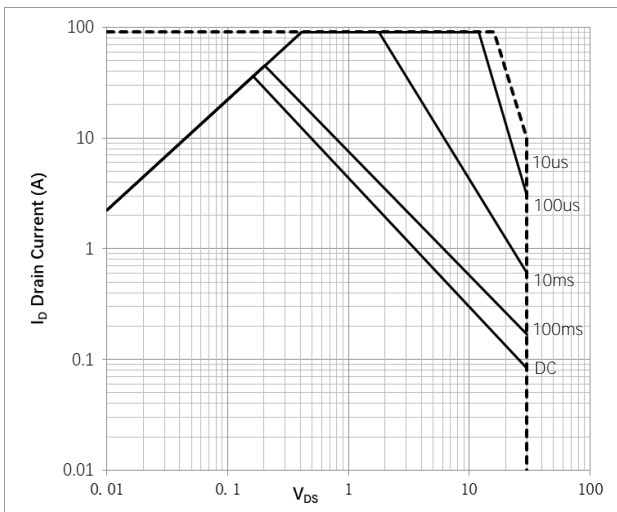


Fig.10 ID-Junction Temperature

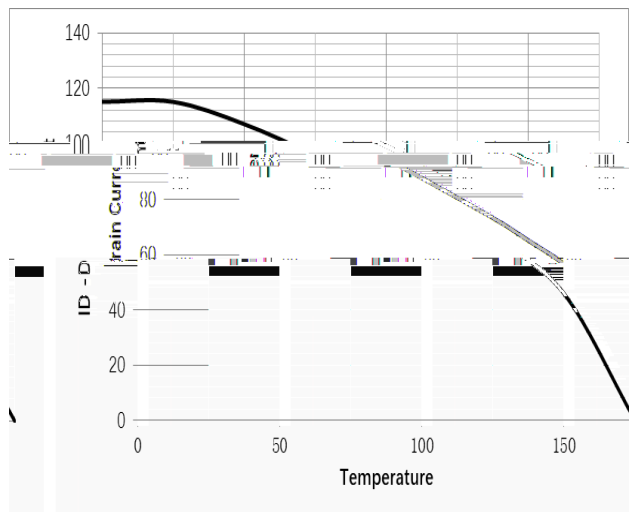


Fig.11 Transfer Characteristics

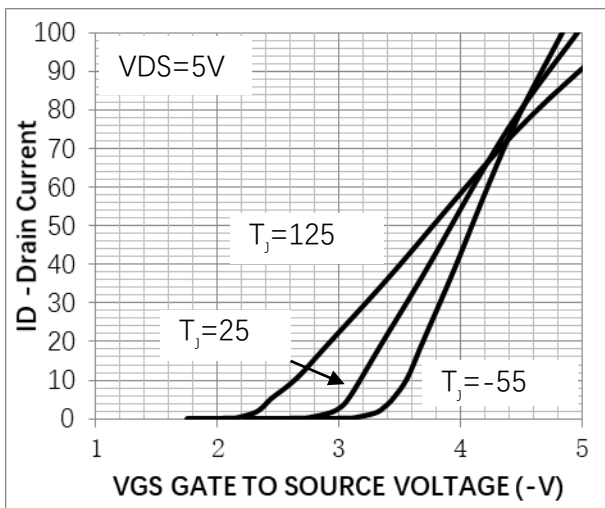




Fig.12 Switching Time Measurement Circuit

Fig.13 Gate Charge Waveform

Fig.14 Resistive Switching Test Circuit

Fig.15 Resistive Switching Test Waveform

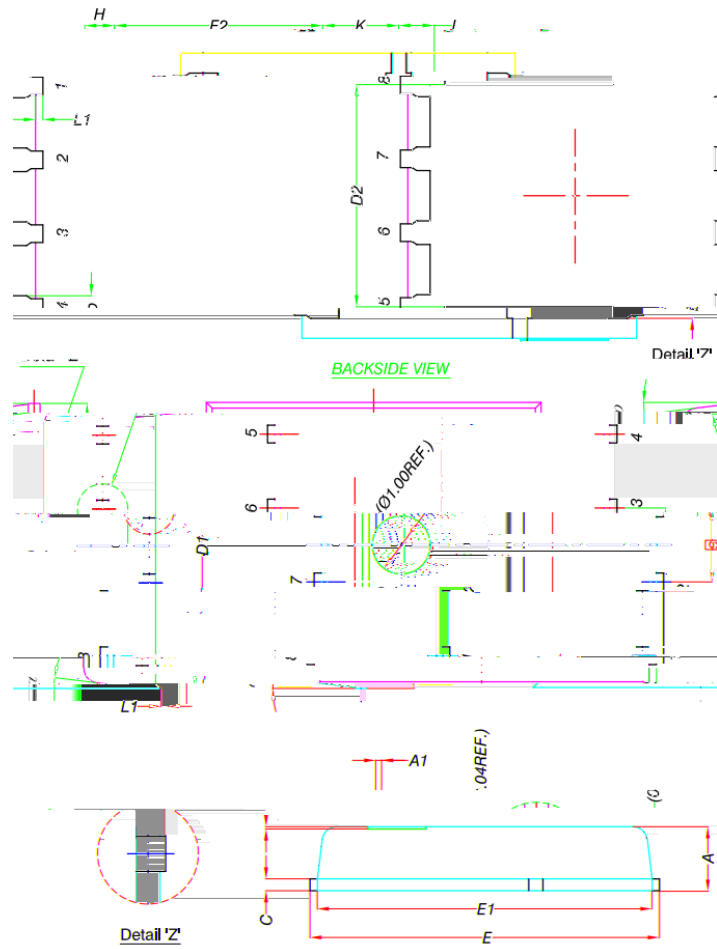
Fig.16 Avalanche Measurement Circuit

Fig.17 Avalanche Waveform



**Dimensions (DFN5x6)**

Unit mm



DIM.	MILLIMETERS		
	MIN.	NOM.	MAX.
A	0.90	1.00	1.10
A1	0	-	0.05
b	0.33	0.41	0.51
C	0.20	0.25	0.30
D1	4.80	4.90	5.00
D2	3.61	3.81	3.96

1	5.70	5.75	5.80	E1
E2	3.30	3.55	3.75	
e	1.27 BSC			
H	0.45	0.51	0.61	
K	1.10			
L1	0.34	0.51	0.61	
3	0.20	0.06	0.1	