T_C =25

Parameter	**Symbol**	Rating	Unit
Drain-Source Voltage	V_{DS}	65	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	$I_{D@}$TC=25	45	A
	$I_{D@}$TC=75	34	A
	$I_{D@}$TC=100	28	A
Pulsed Drain Current	I_{DM}	135	A
Total Power Dissipation	P_D@TC=25	43	W
Total Power Dissipation	P_D@TA=25	2.3	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy@L=0.1mH	E_{AS}	95	mJ

Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	2.9	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	54	° C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	° C

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS} =0V, I_D =250uA	65			V
Gate Threshold Voltage	$V_{GS(TH)}$	V_{GS} =V_{DS}, I_D =250uA	1.5		2.5	V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=0.8 BV_{DSS}, V_{GS} =0V			1.0	uA

Fig.1 Gate-Charge Characteristics

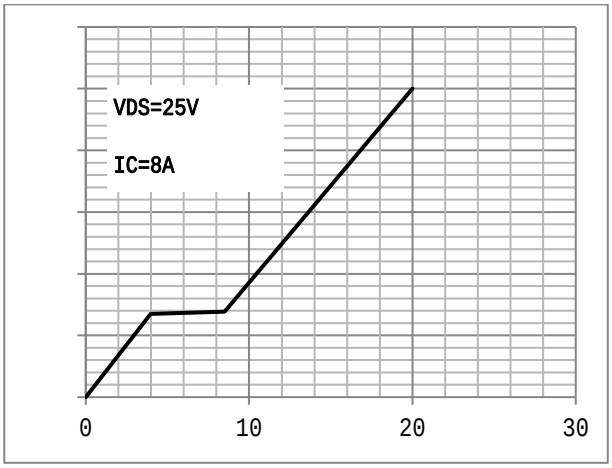


Fig.2 Capacitance Characteristics

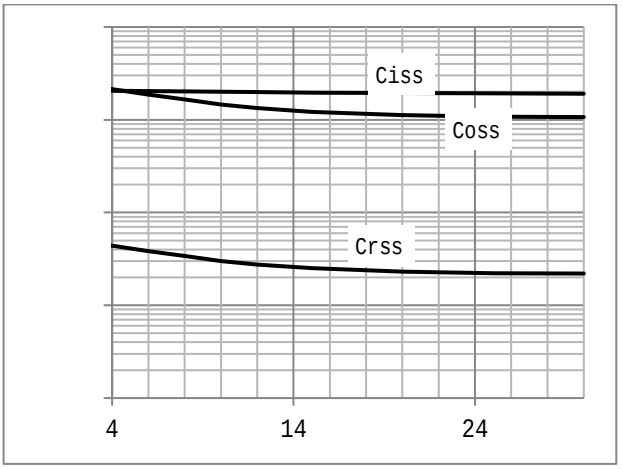


Fig.3 Power Dissipation

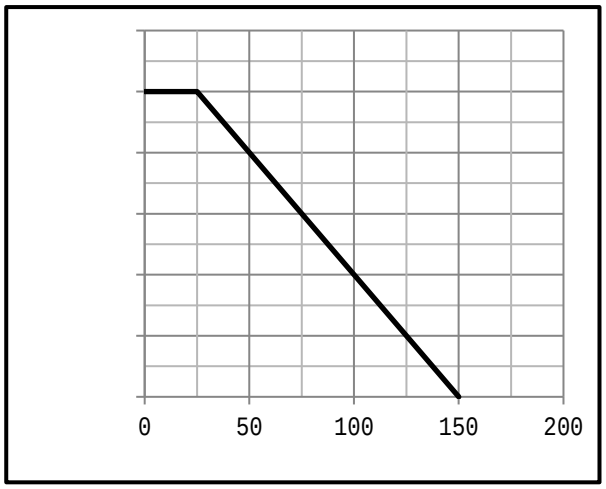


Fig.4 Typical output Characteristics

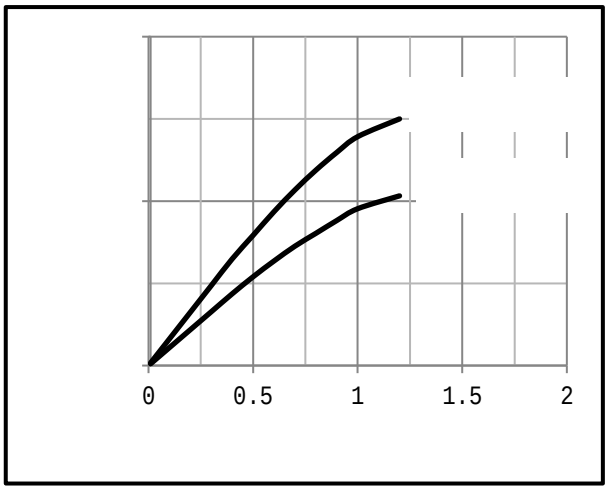


Fig.5 Threshold Voltage V.S Junction Temperature

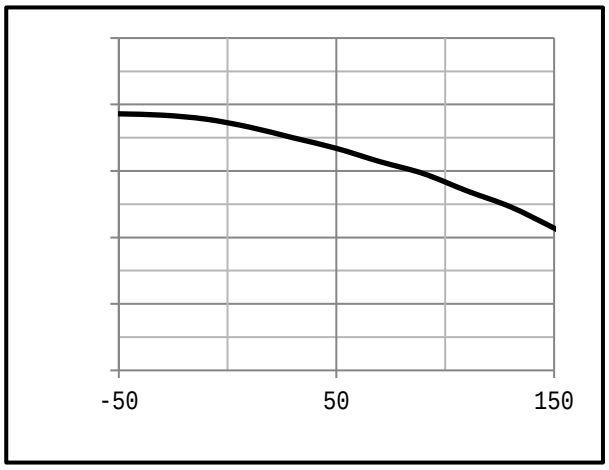
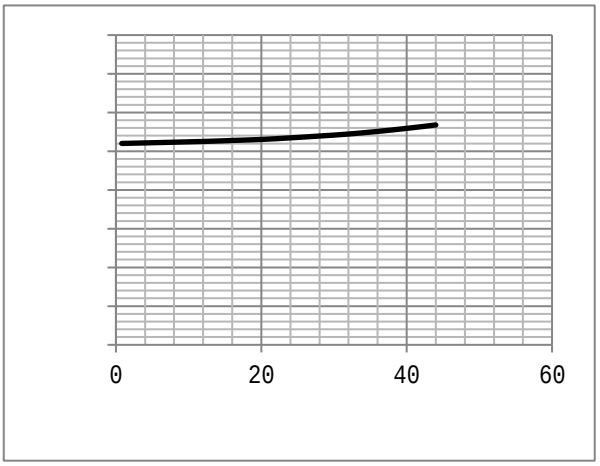
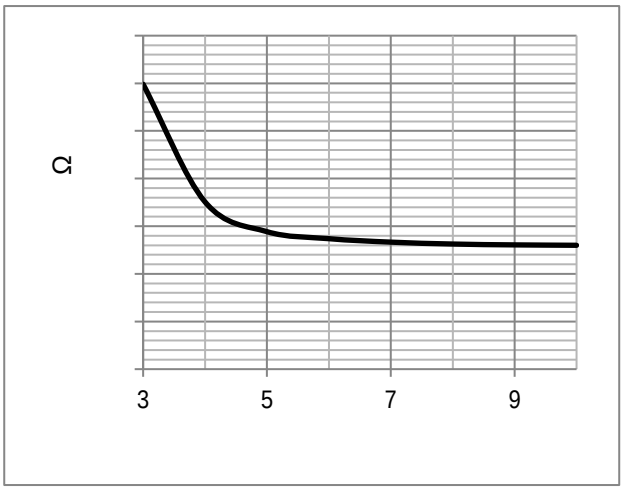


Fig.6 Resistance V.S Drain Current





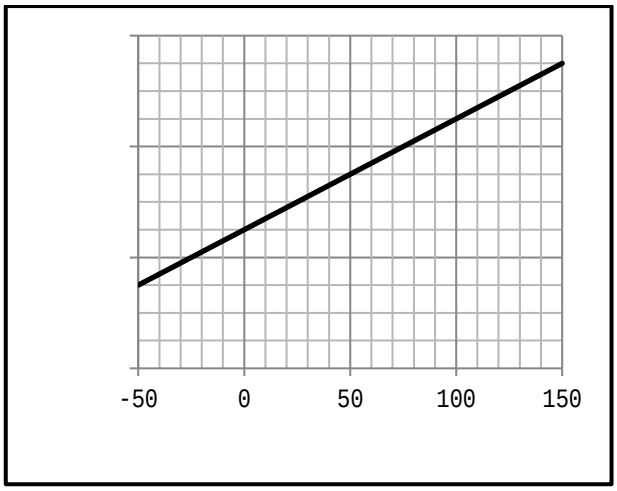
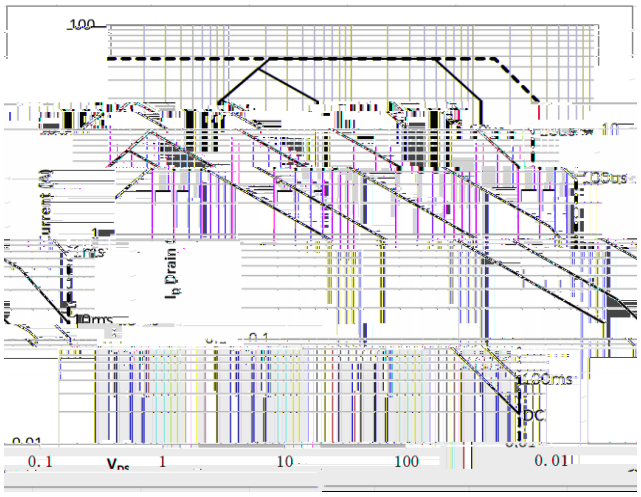


Fig.9 SOA Maximum Safe Operating Area

Fig.10 ID-Junction Temperature



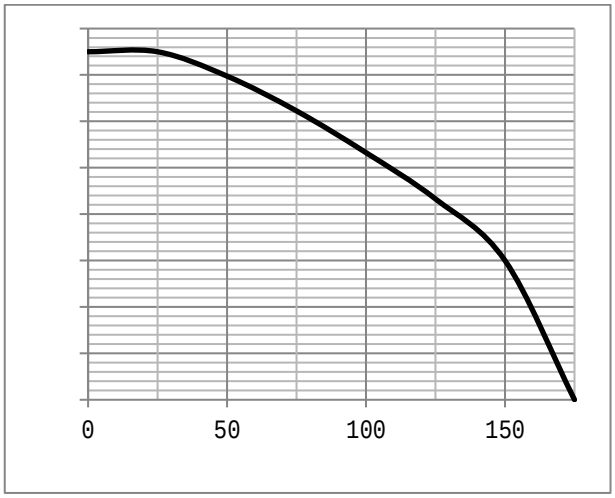
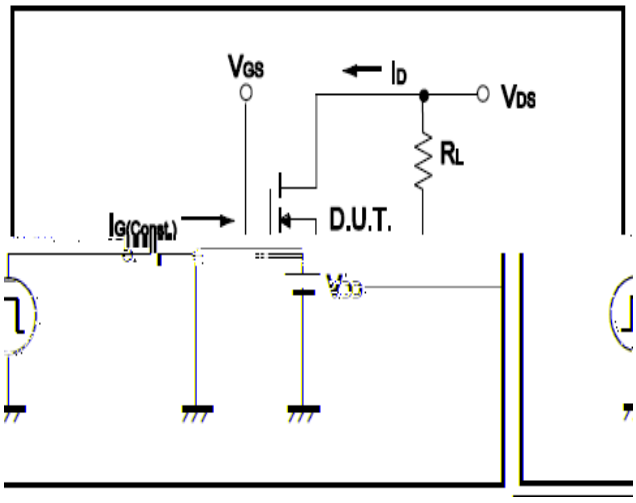


Fig.11 Switching Time Measurement Circuit

Fig.12 Gate Charge Waveform



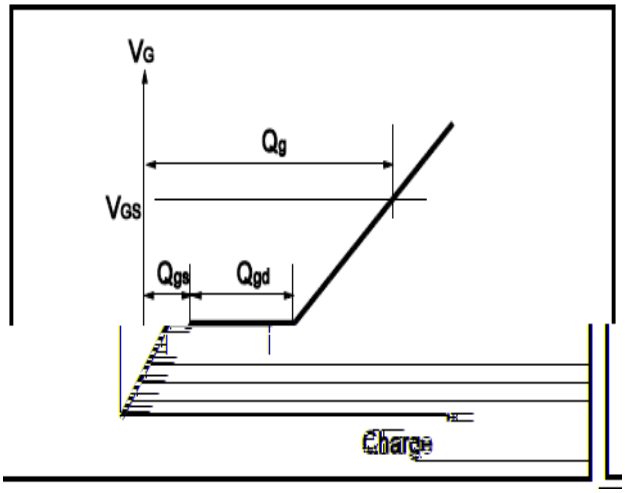


Fig.13 Switching Time Measurement Circuit

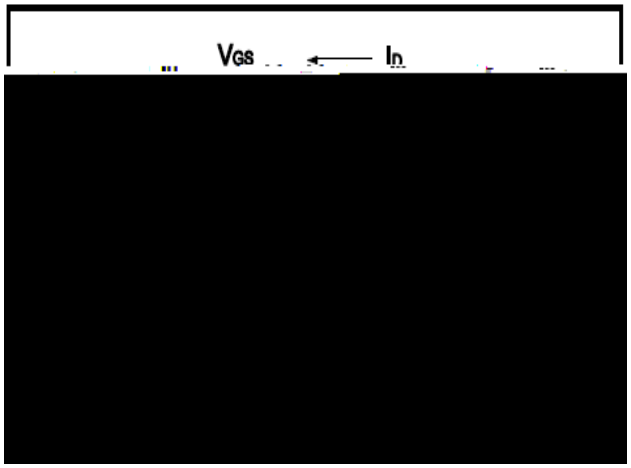
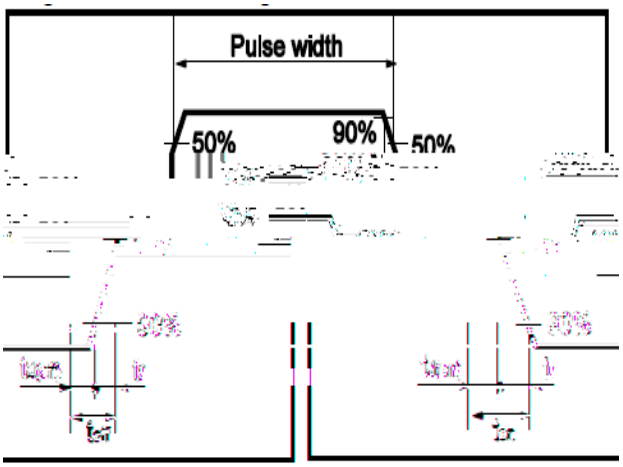
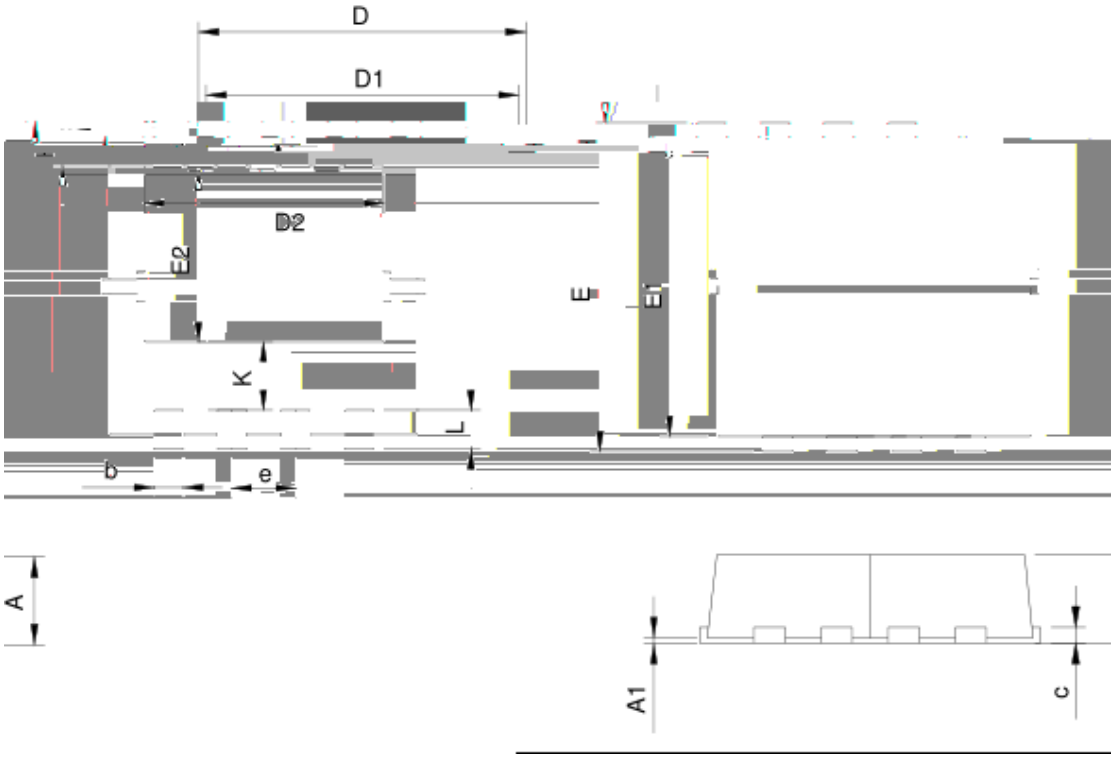


Fig.14 Gate Charge Waveform



sions(DFN3×3)

Unit mm



DFN3.3x3.3-8

RECOMMENDED LAND PATTERN

SYMBOL	MILLIMETERS		INCHES	
	MIN.	MAX.	MIN.	MAX.
A	0.70	1.00	0.028	0.039
A1	0.00	0.05	0.000	0.002
b	0.25	0.35	0.010	0.014
c	0.14	0.20	0.006	0.008
D	3.10	3.50	0.122	0.138
D1	3.05	3.25	0.120	0.128
D2	2.35	2.55	0.093	0.100
E	3.10	3.50	0.122	0.138
E1	2.90	3.10	0.114	0.122
e	0.65 BSC		0.026 BSC	
H	0.32	0.52	0.013	0.020
K	0.59	0.79	0.023	0.031
L	0.25	0.35	0.010	0.022