M

E 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	68	A
	$I_{D@}$TC=75	52	A

Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}			2.2	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	62	° C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	° C

I G

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
Gate- Source Leakage Current	I_{GSS}	V_{GS}=±20V, V_{DS} =0V			100	nA
Static Drain-source On Resistance	! "	V_{GS}=10V, I_D=10A				
		V_{GS}=4.5V, I_D=5A				
Forward Transconductance	g_{FS}	V_{DS} =25V, I_D=10A				
Source-drain voltage	V_{SD}	Is=10A				

I G

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Gate Risistance	Rg	f = 1MHz		2.1		
Input capacitance	Ciss	f = 1MHz V_{DS}				

Note: ;

Fig.1 Gate-Charge Characteristics

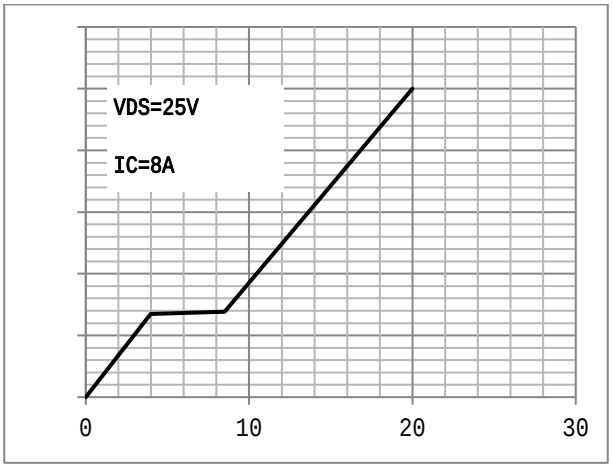


Fig.2 Capacitance Characteristics

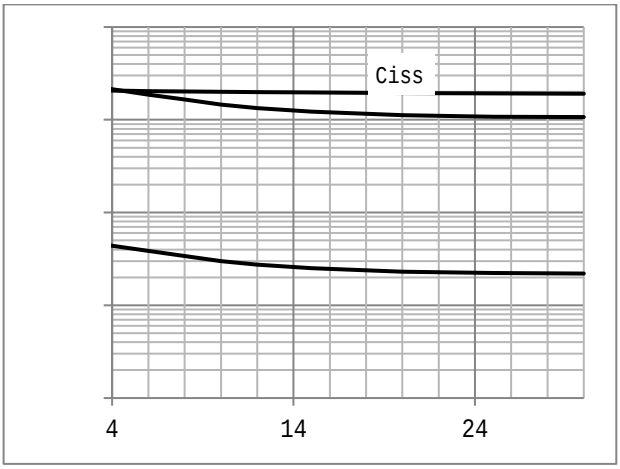


Fig.3 Power Dissipation

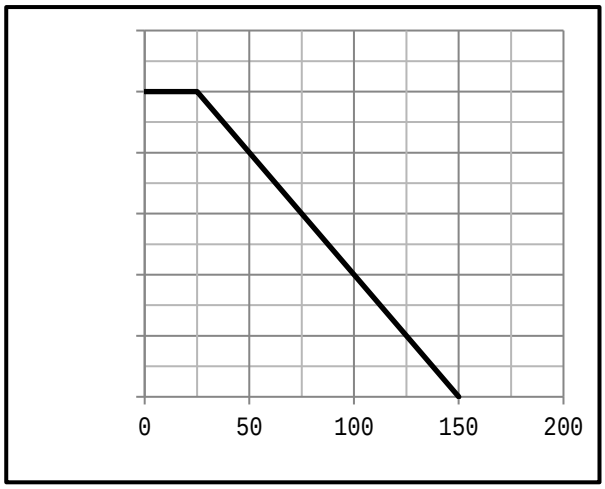


Fig.4 Typical output Characteristics

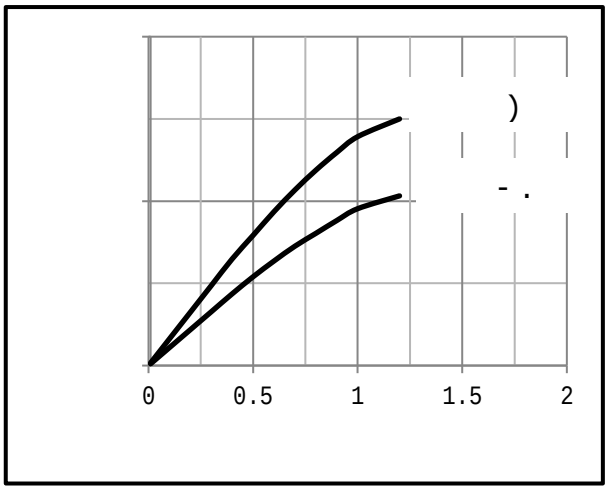


Fig.5 Threshold Voltage V.S Junction Temperature

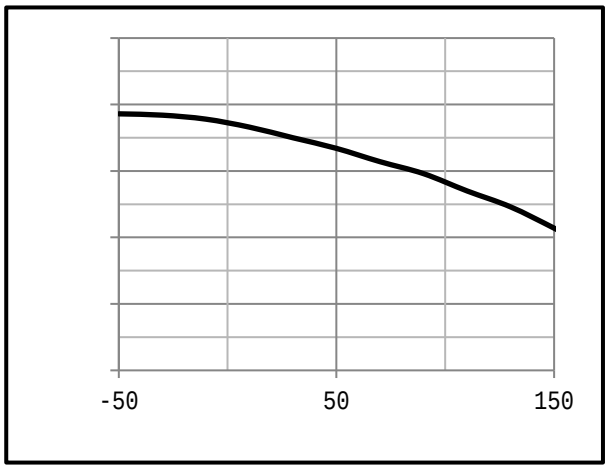
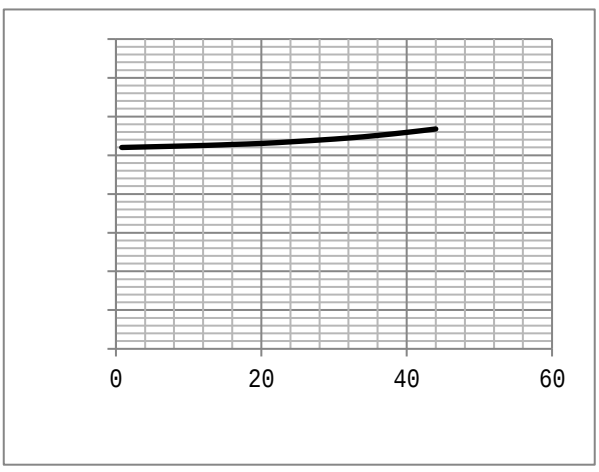
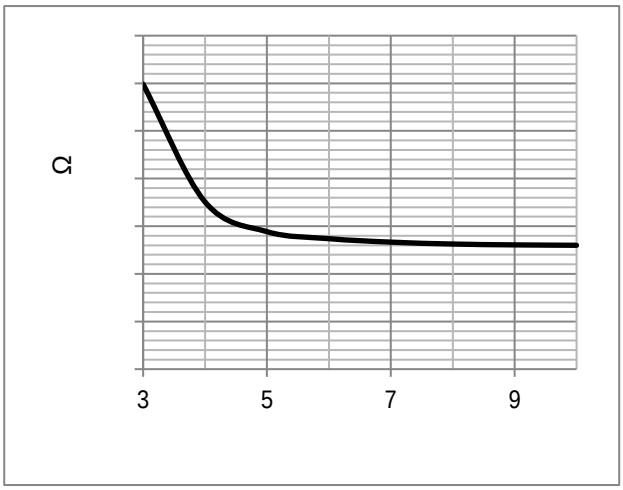


Fig.6 Resistance V.S Drain Current



0 1



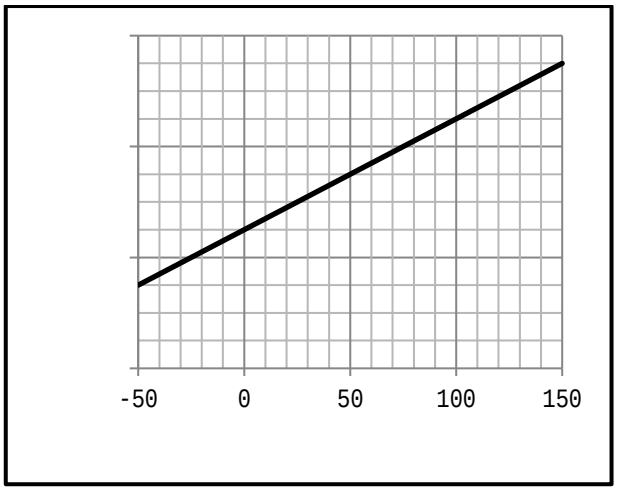
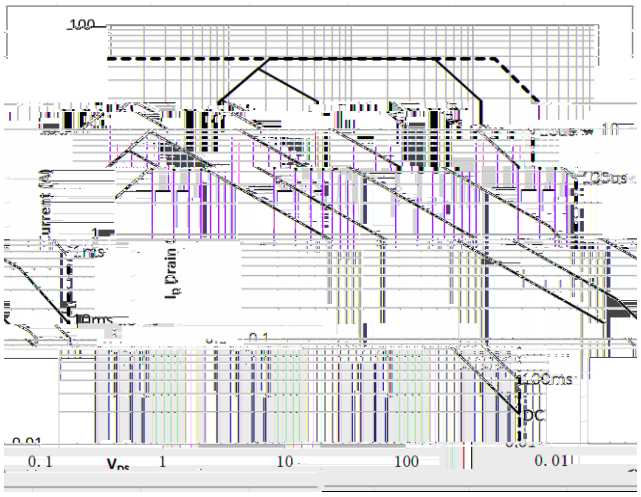


Fig.9 SOA Maximum Safe Operating Area

Fig.10 ID-Junction Temperature



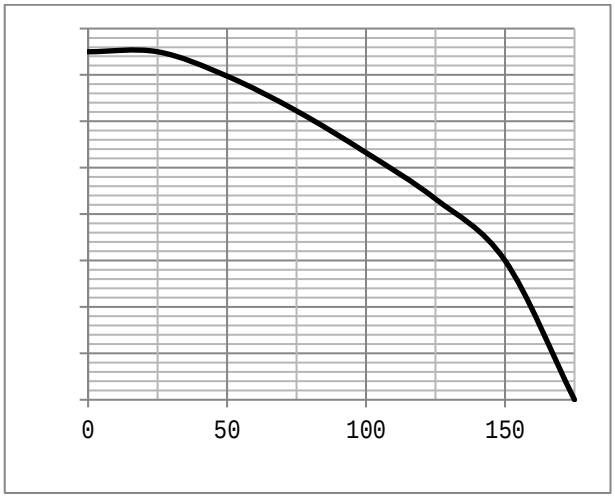
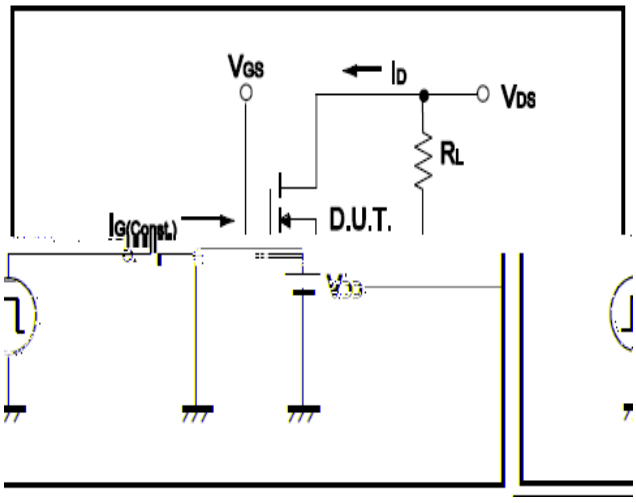


Fig.11 Switching Time Measurement Circuit

Fig.12 Gate Charge Waveform



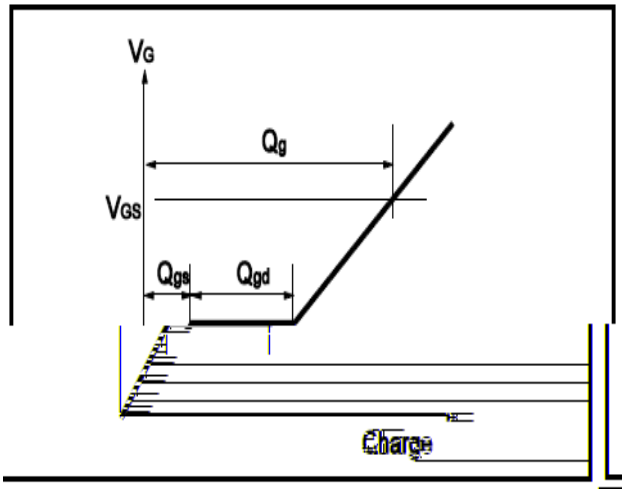


Fig.13 Switching Time Measurement Circuit

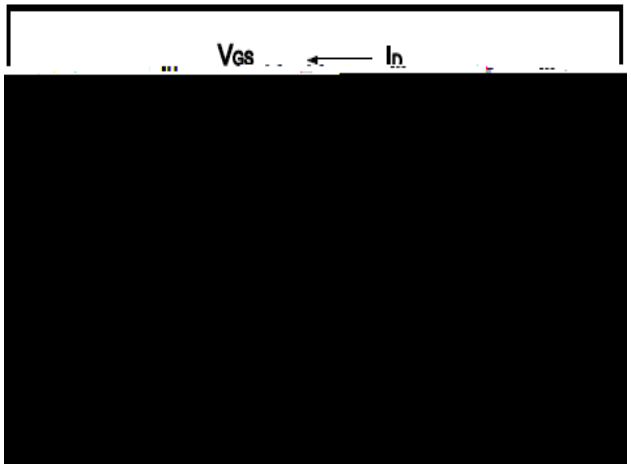


Fig.14 Gate Charge Waveform