



CES	Collector-emitter voltage	650	V
GES	Gate-emitter voltage	±20	V
C	Continuous collector current ($I_{c=25}$)	100	A
	Continuous collector current ($I_{c=100}$)	50	A
CM	Pulsed collector current, I_p limited by t_s 5		





F	Diode forward voltage	$I_F=50A$	2.0	2.3	2.6	V
		$I_F=50A, v_j=175$	-	1.9	-	V
t_r	Diode reverse recovery time	$V_R=400V$ $I_F=50A$ $d I_F/d t = -450A/\mu s$	-	78	-	ns
I_{rrm}	Diode peak reverse recovery current		-	15	-	A
Q_{rr}	Diode reverse recovery charge		-	511	-	nC
t_r	Diode reverse recovery time	$V_R=400V$ $I_F=50A$ $d I_F/d t = -450A/\mu s$ $v_j=175$	-	126	-	ns
I_{rrm}	Diode peak reverse recovery current		-	26	-	A
Q_{rr}	Diode reverse recovery charge		-	2163	-	nC

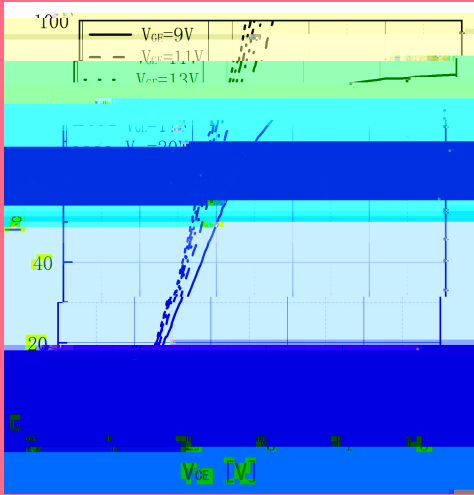


Fig 1. Typical output characteristic ($v_j=25$)

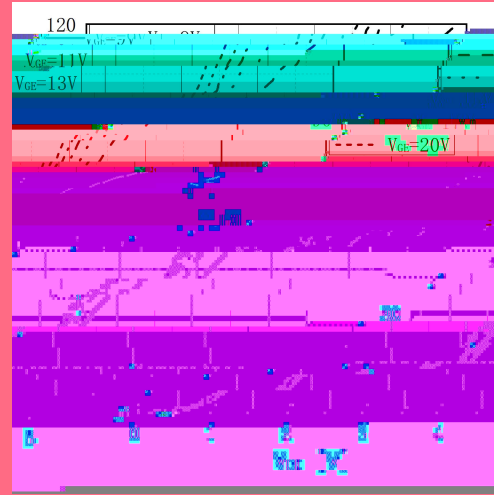


Fig 2. Typical output characteristic($v_j=175$)

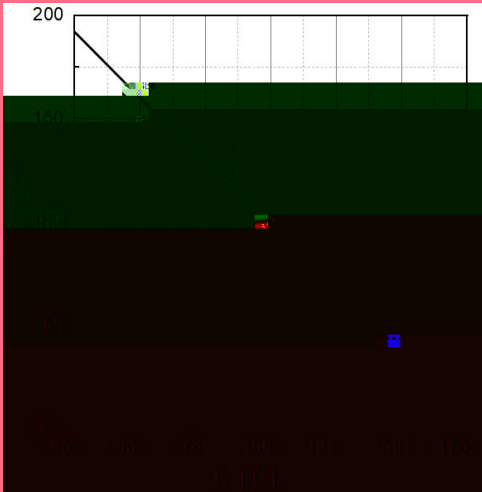


Fig 3. Power dissipation as a function of

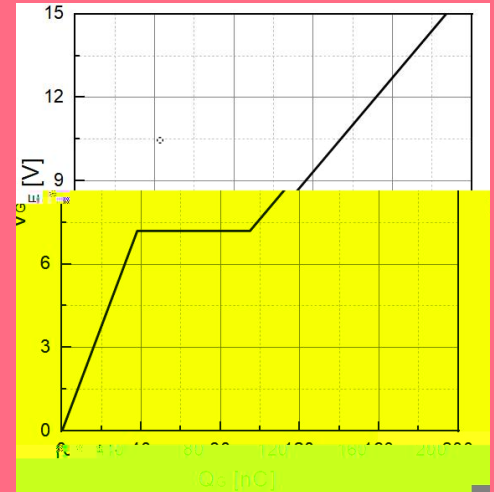


Fig 4. Typical Gate charge

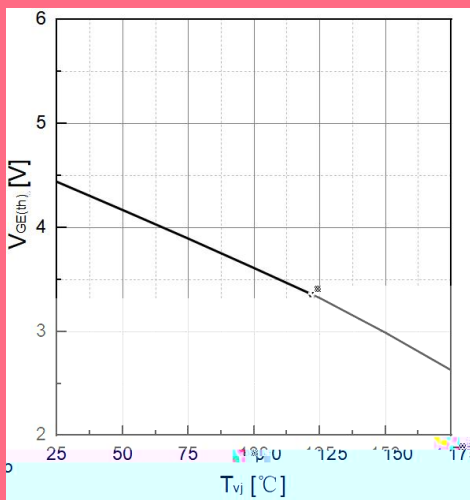
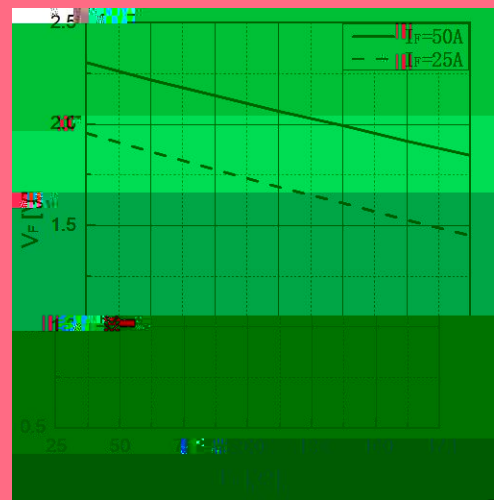


Fig 5. Typical $V_{GE(th)}$ as a function of v_j ($c=1mA$)



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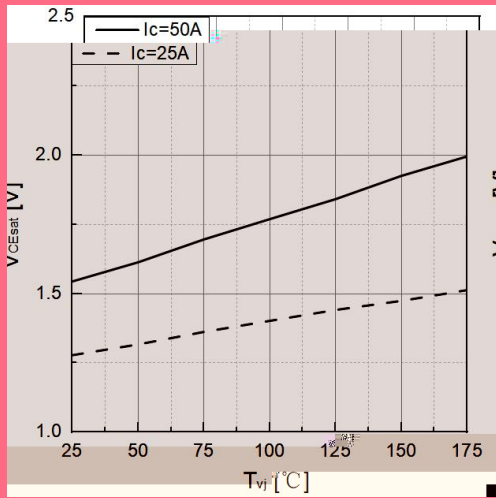


Fig 7. Typical V_{CEsat} as a function of T_{vj}

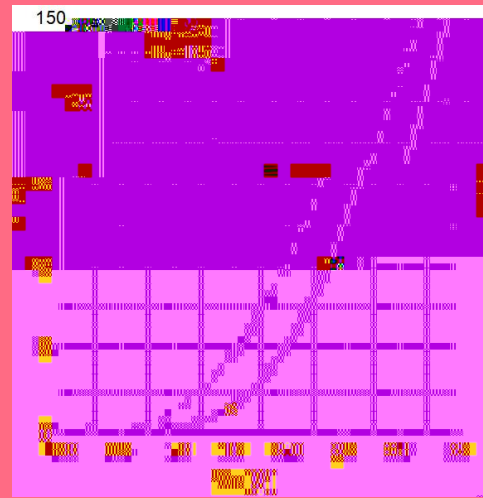


Fig 8. Typical t_{on} as a function of F

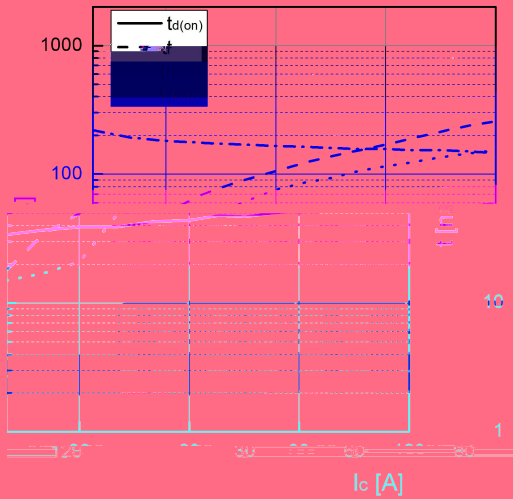


Fig 9. Typical switching time as a function of I_c

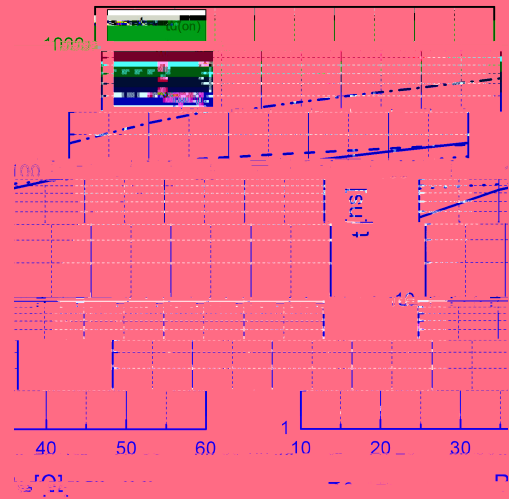


Fig 10. Typical switching times as a function of F_g

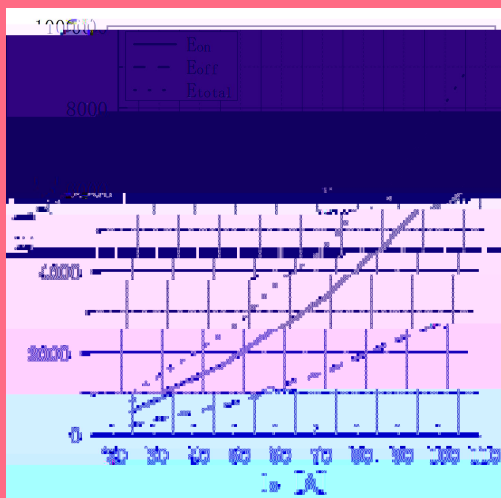


Fig 11. Typical switching energy losses as a function of I_c

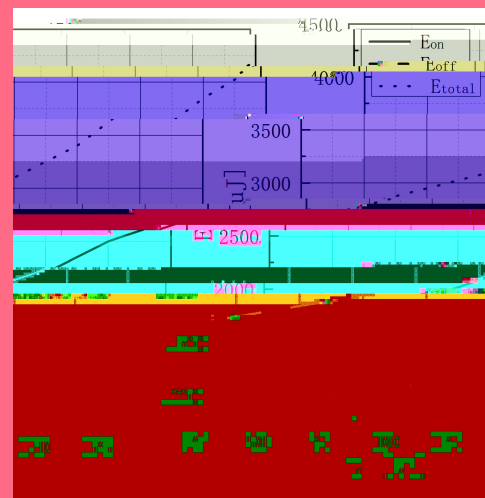


Fig 12. Typical switching energy losses as a function of T_{vj}



Dimensions

Ref.	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	15.95	16.00	16.05	0.627	0.629	0.631
B	21.85	21.90	21.92	0.860	0.862	0.864
B1	5.15	5.20	5.25	0.202	0.204	0.206
B2	4.32	4.37	4.42	0.170	0.172	0.174
C	19.01	19.11	19.21	0.748	0.752	0.756
D	2.07	2.10	2.13	0.081	0.082	0.083
E	3.07	3.10	3.13	0.120	0.122	0.123
F	1.15	1.20	1.25	0.045	0.047	0.049
G		5.45REF			0.214REF	
G1	5.85	5.90	5.95	0.230	0.232	0.234
G2	-	0.60	-	-	0.023	-
G3	1.76	1.81	1.86	0.069	0.071	0.073
H	4.95					

