JJMICROELECTRONICS

650 50A

V_{CES}	Collector-emitter voltage	650	V
V_{GES}	Gate-emitter voltage	±20	V
I_C	Continuous collector current (T_C=25)	100	A
	Continuous collector current (T_C=100)	50	A
I_{CM}	Pulsed collector current, t_p limited by T_{jmax}		

F	Diode forward voltage	F=50A	2.0	2.3	2.6	V
		F=50A, vj=175	-	1.9	-	V
rr	Diode reverse recovery time	R=400V F=50A d F/d =-450A/μs	-	78	-	ns
rrm	Diode peak reverse recovery current		-	15	-	A
rr	Diode reverse recovery charge		-	511	-	nC
rr	Diode reverse recovery time	R=400V F=50A d F/d =-450A/μs vj=175	-	126	-	ns
rrm	Diode peak reverse recovery current		-	26	-	A
rr	Diode reverse recovery charge		-	2163	-	nC

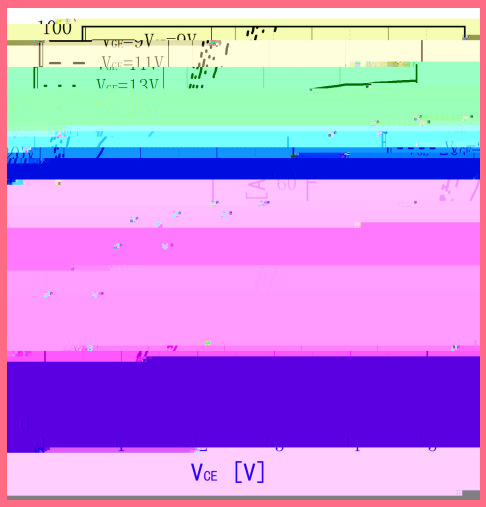


Fig 1. Typical output characteristic (vj=25)

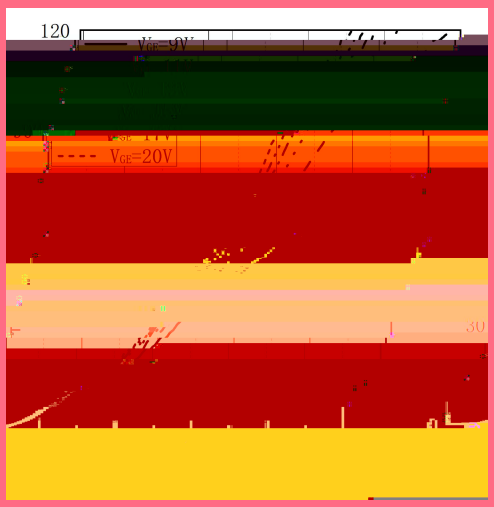


Fig 2. Typical output characteristic(vj=175)

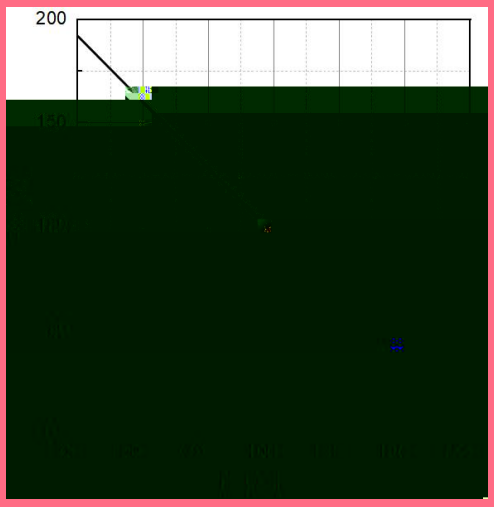


Fig 3. Power dissipation as a function of

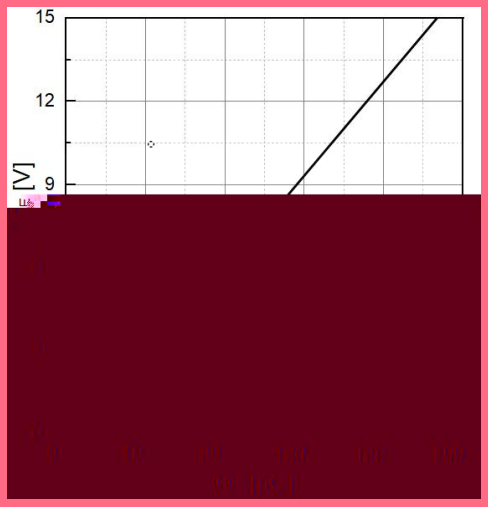


Fig 4. Typical Gate charge

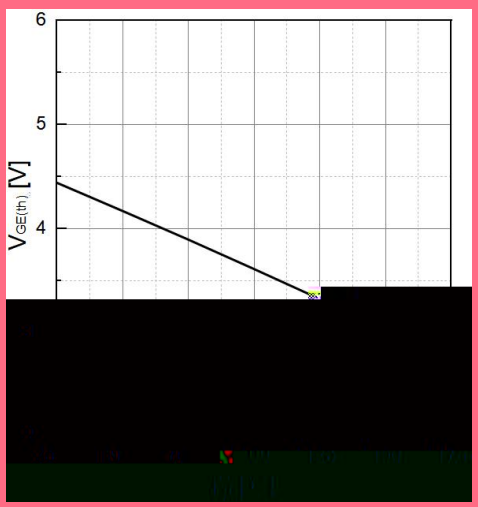
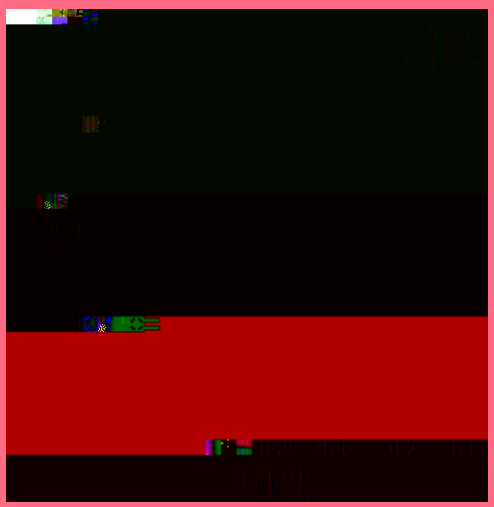


Fig 5. Typical GE(th) as a function of vj (C=1mA)



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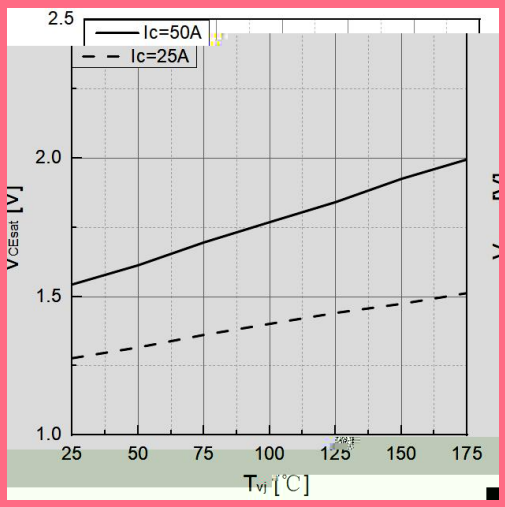

Fig 7. Typical $_{CEsat}$ as a function of $_{vj}$

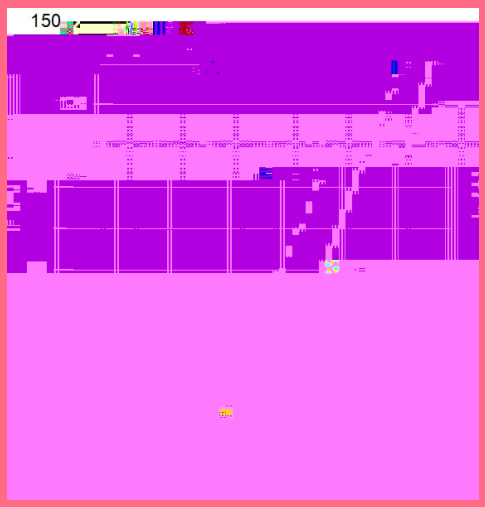

Fig 8. Typical $_{F}$ as a function of $_{F}$

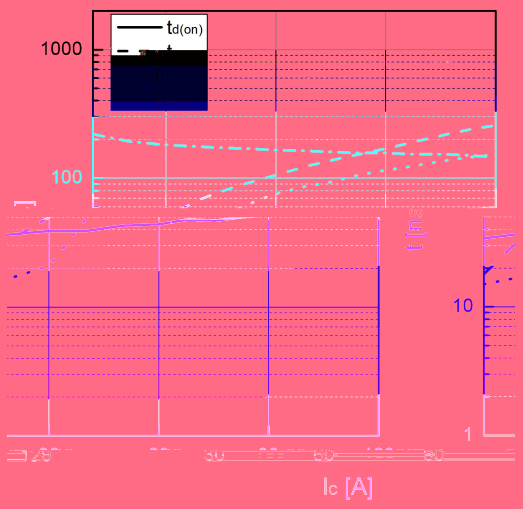

Fig 9. Typical switching time as a function of $_{C}$

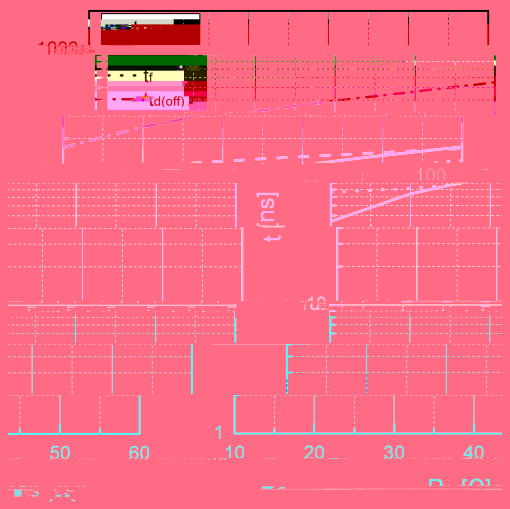

Fig 10. Typical switching times as a function of $_{G}$

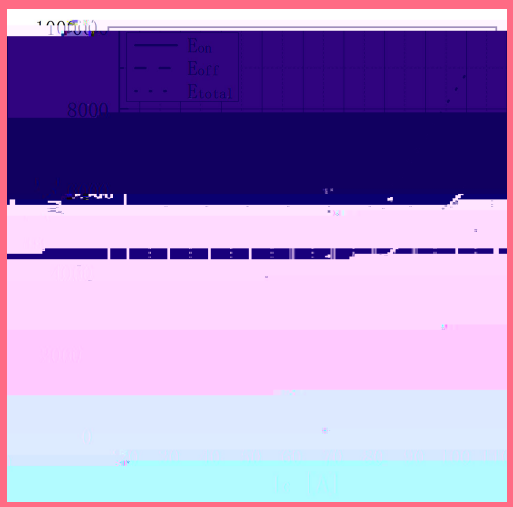

Fig 11. Typical switching energy losses as a function of $_{C}$

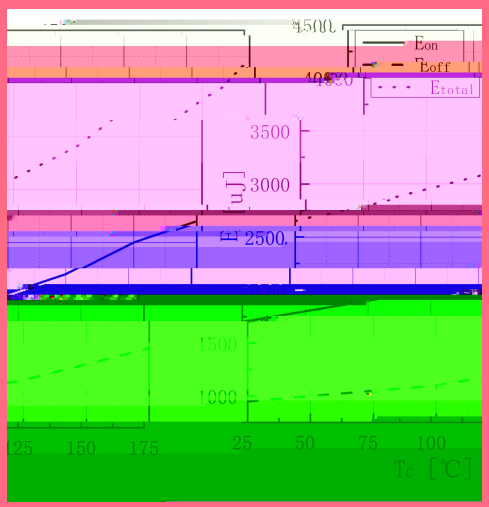

Fig 12. Typical switching energy losses as a function of Tvj

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