JJMICROELECTRONICS

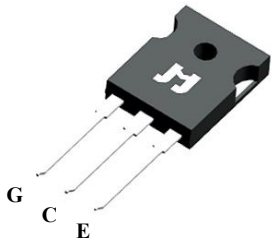
650V 30A Trench and Field Stop IGBT

JJT30N65UK

K :

- V_{CE}=650
- I_C=30A@T_C=100
- $V_{CE(\ \ )}$=1.7

-247



F :

- -
- E .

B :

- H .
- H .
- H .

A :

- FC
-

	M		M
JJ 30 65 K	3065 K	-247	

V_{CE}	C -	650	
V_{GE}	[redacted]	20	
I_C		60	A
	C (T_C=100)	30	A
I_{CM}	, t T	120	A
I_F	D (T_C=100)	30	A
I_{FM}	D , t T	120	A
P	(T_C=25)	125	
	(T_C=100)	63	
T		-40 +175	
T		-55 +150	

. **M** .

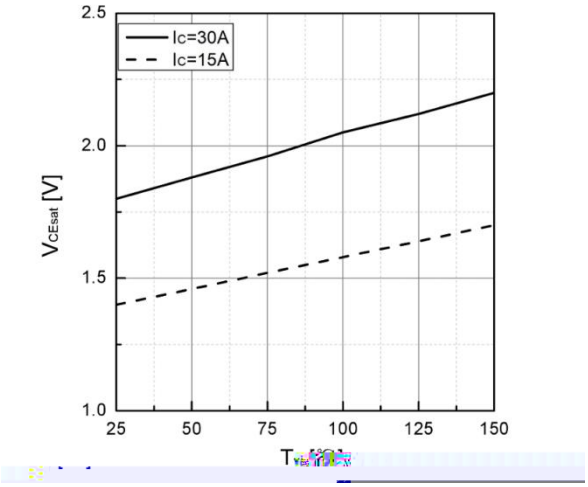
R (-) , IGB □

				M .	. M .	
BV_{CE}	C -		V_{GE}=0 , I_C=250 A	650	- -	
I_{CE}	C -		V_{CE}=650 , V_{GE}=0	-	- 50	A
I_{GE}	G	,				

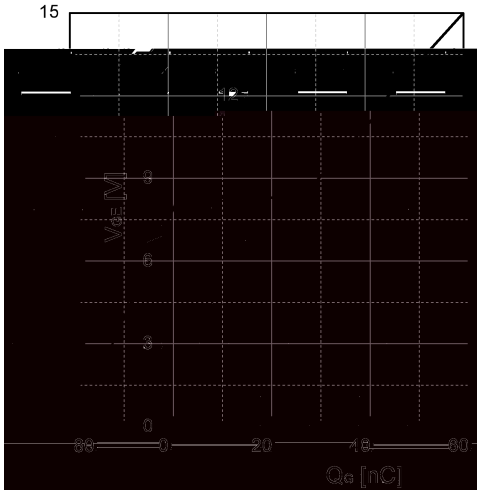
			M .	.	M .	
t ( )	-	V_{CC}=400 V_{GE}=0/15 I_C=30A R_G=10Ω I	-	29	-	
t			-	39	-	
t ( )	-		-	110	-	
t	F		-	25	-	
E	-		-	0.6	-	J
E	-		-	0.3	-	J
E			-	0.9	-	J
t ( )	-	V_{CC}=400 V_{GE}=0/15 I_C=30A R_G=10Ω I T =150	-	29	-	
t			-	40	-	
t ( )	-		-	120	-	
t	F		-	34	-	
E	-		-	0.8	-	J
E	-		-	0.5	-	J
E			-	1.3	-	J

E **D** (T =25)

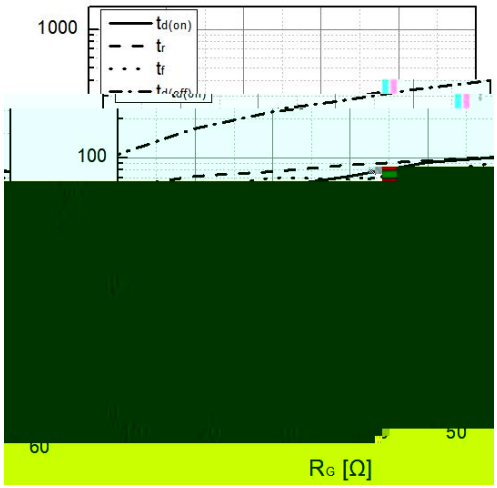
			M .	.	M .	
V_F	D	I_F=30A	-	2.2	-	
		I_F=30A,T =150	-	1.7	-	
t	D	V =400 I_F=30A i_F/ t=-1000A/	-	55	-	
I	D		-	17	-	A
Q	D		-	560	-	C
t	D	V =400 I_F=30A i_F/ t=-1000A/ T =150	-	97	-	
I	D		-	25	-	A
Q	D		-	1460	-	C



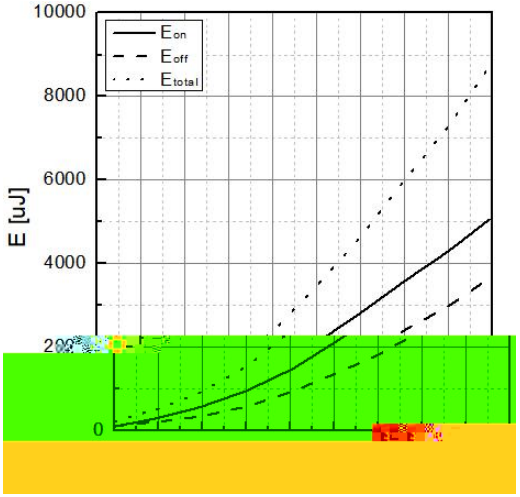
F 7. V_{CE} T



F 8. G

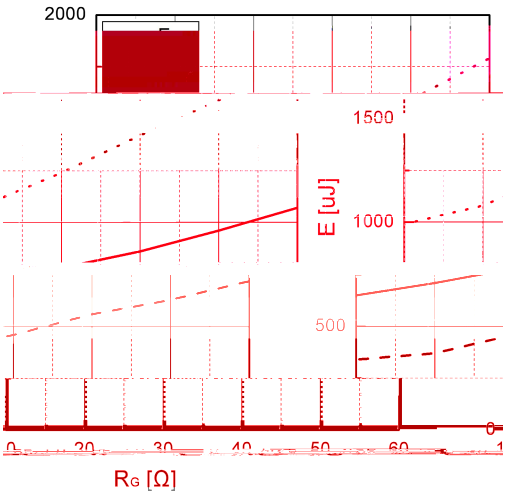


F 9. R_G



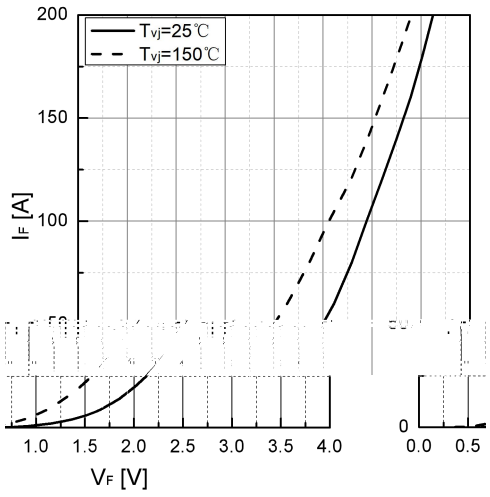
F 10.

I_C

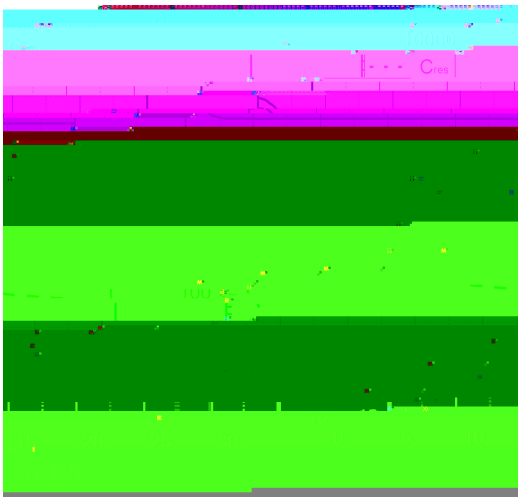


F 11.

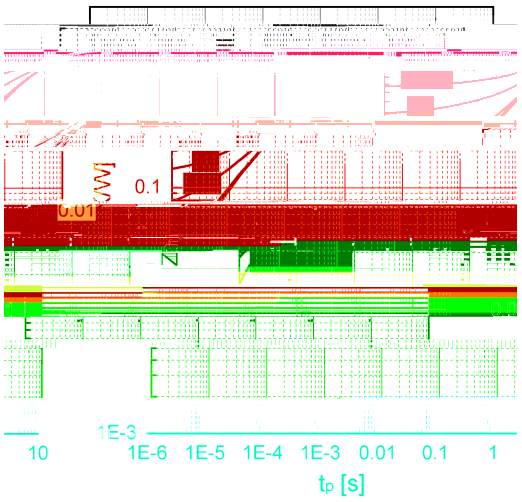
R_G



F 12. I_F V_F



F 13. V_{CE} (=1M , V_{GE}=0)



F 14. IGB

D

.		M			I	
	M .	.	M .	M .	.	M .
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		5.45 EF			0.214 EF	
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	5.00	5.05	0.194	0.196	0.198
J	1.44	1.49	1.54	0.056	0.058	0.060
K	2.30	2.35	2.40	0.090	0.092	0.094
L	0.59	0.60				

D		C
2024-10-30	1.0	.

D

LEA E E - J J J M C ., L ("JJM") , ,
/ . I
, .
JJM JJM'
JJM'
. JJM
, , JJM' . A JJM
. JJM
J J J M C ., L .
. 2024 JJM - A