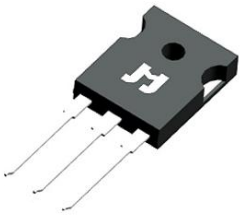
JJMICROELECTRONICS

1200V 25A Trench and Field Stop IGBT

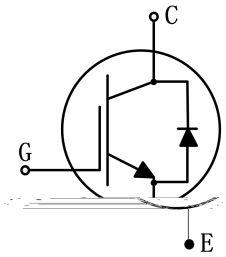
JJT25N120SE

- V_{CE}=1200V
- I_C=25A@T_C=100
- $V_{CE(\ \ )}$=1.7V

TO-247



- T -
- H
- L
- E
- S 10
- H
- R HS



- G
- M

T	M	P	P M
JJT25N120SE	T25120SE	TO-247	T

V_{CES}	C -	1200	V
V_{GES}	G -	20	V
I_C	C (T_C=25)	50	A
	C (T_C=100)	25	A
I_{CM}	P , t T	100	A
I_F	D (T_C=100)	25	A
I_{FM}	D , t T	100	A
t	S	10	
P	P (T_C=25)	375	
	P (T_C=100)	188	
T	O	-40 +175	
T	S	-55 +150	

R (-)	T , IGBT	-	0.40	K/
R (-)	T , D	-	1.10	K/
R (-)	T ,	-	40	K/

BV_{CES}	C	-	V_{GE}=0V, I_C=250	A	1200	-	-	V	
I_{CES}	C	E							

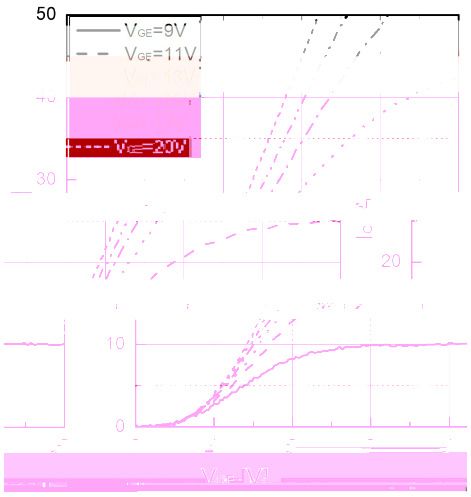
S

$t_{(\ )}$	T -	V_{CC}=600V V_{GE}=0/15V I_C=25A R_G=10Ω I	-	31	-	
t	R		-	62	-	
$t_{(\ )}$	T -		-	184	-	
t	F		-	59	-	
E	T -		-	2.0	-	J
E	T -		-	0.9	-	J
E	T		-	2.9	-	J
$t_{(\ )}$	T -	V_{CC}=600V V_{GE}=0/15V I_C=25A R_G=10Ω I T =175	-	33	-	
t	R		-	67	-	
$t_{(\ )}$	T -		-	206	-	
t	F		-	87	-	
E	T -		-	3.1	-	J
E	T -		-	1.3	-	J
E	T		-	4.4	-	J

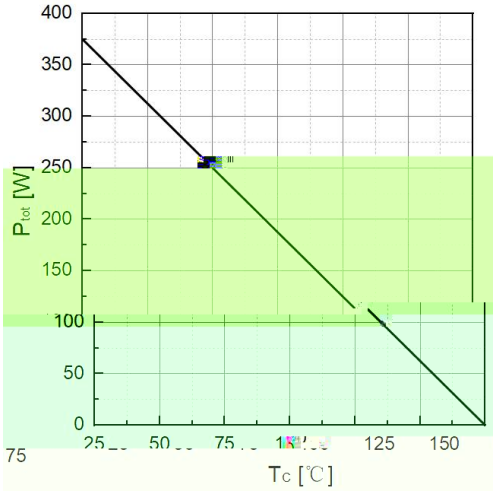
(*T* =25)

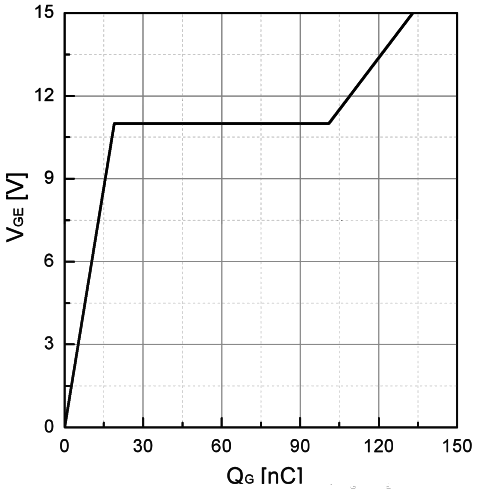
V_F	D	I_F=25A	-	2.0	-	V
		I_F=25A *T* =175	-	1.6	-	V
t	D	V_R=600V I_F=25A i_F/ *t*=-250A/	-	309	-	
I	D		-	7	-	A
Q	D		-	1038	-	C
t	D	V_R=600V I_F=25A i_F/ *t*=-250A/ *T* =175	-	480	-	
I	D		-	11	-	A
Q	D		-	3000	-	C

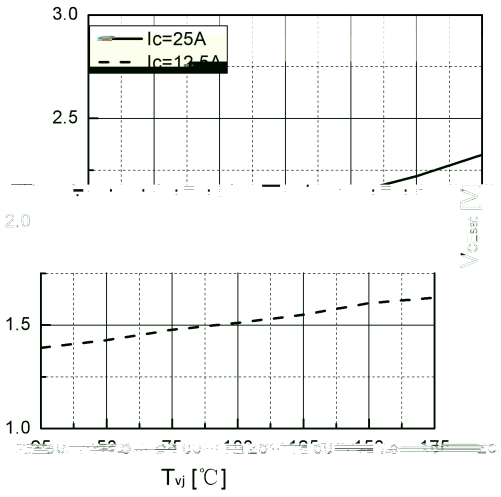
F 1. T (*T* =25)



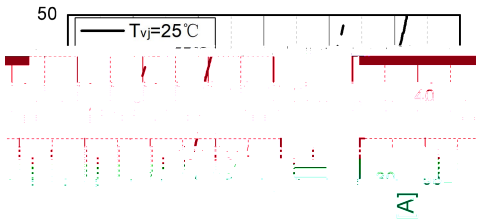
F 2. T (*T* =175)



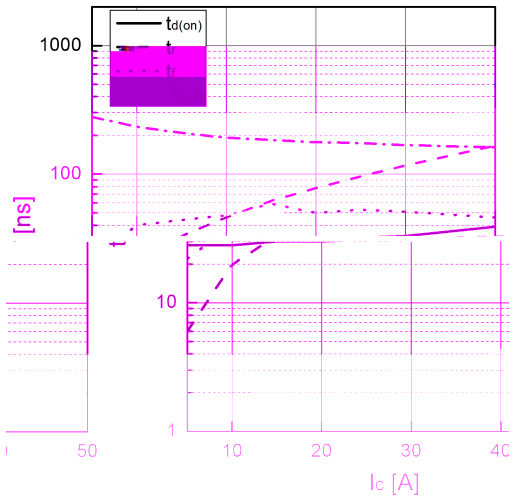




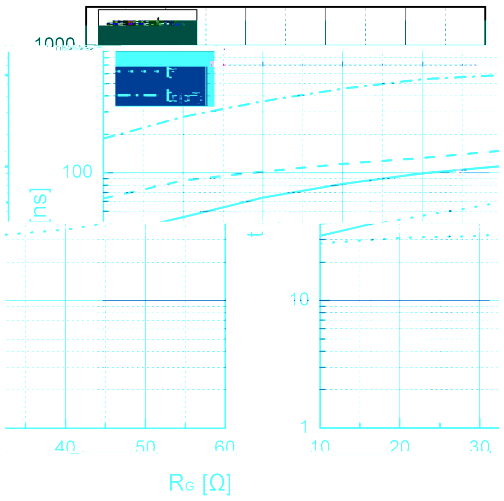
F 7. T V_{CE} T



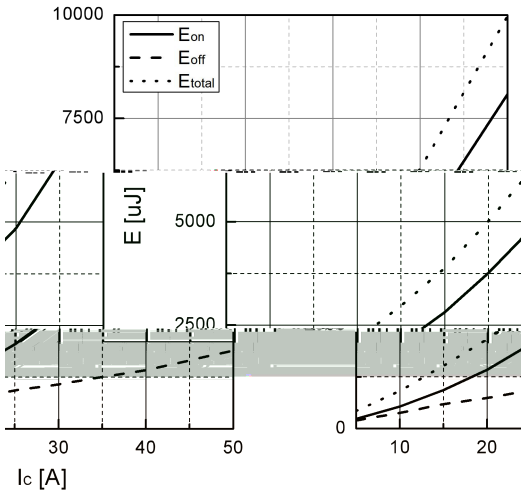
F 8. T I_F V_F



F 9. T I_C

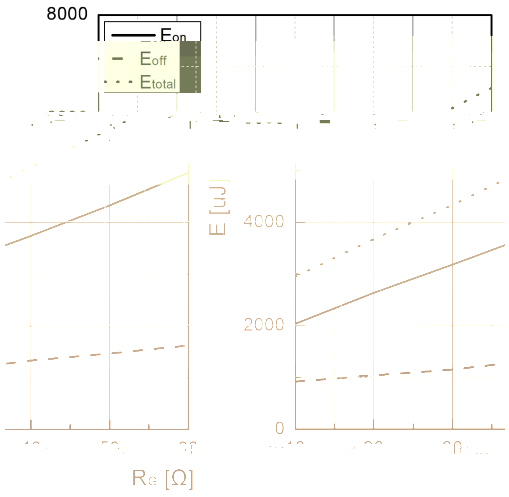


F 10. T R_G



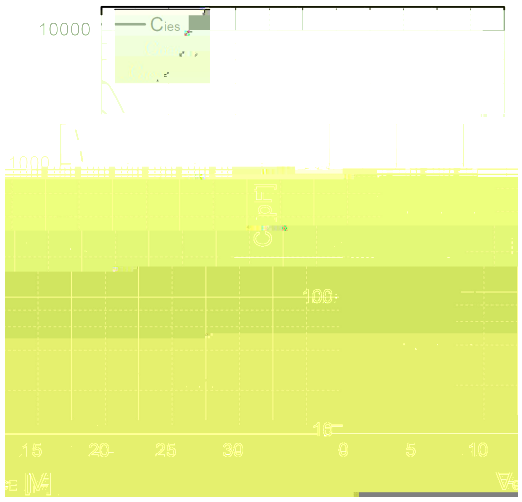
F 11. T

I_C

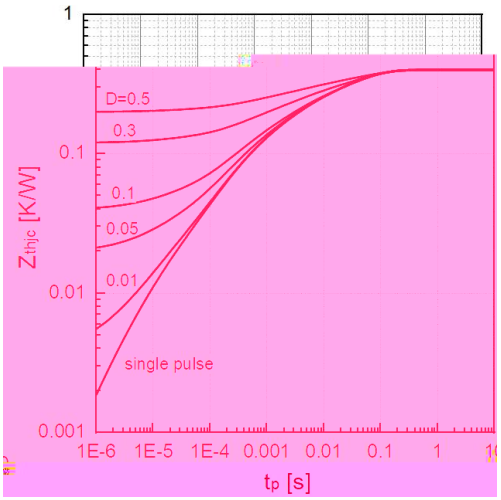


F 12. T

R_G

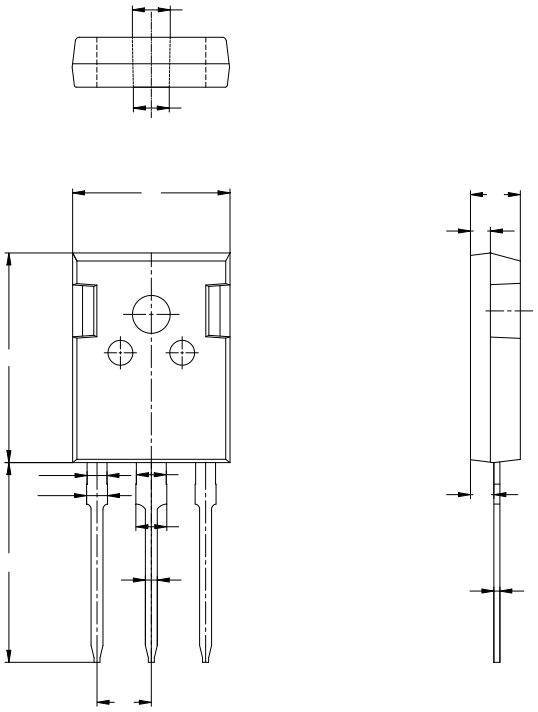


F 13. T V_{CE} (=1M , V_{GE}=0V)



F 14. T IGBT

TO-247



R .	D					
	M			I		
	M .	T .	M .	M .	T .	M .
A	15.50	15.80	16.10	0.610	0.622	0.634
B	20.80	21.00	21.20	0.819	0.827	0.835
C	19.70	20.00	20.30	0.776	0.787	0.799
D	1.80	2.00	2.20	0.071	0.079	0.087
E	1.90	2.10	2.30	0.075	0.083	0.091
F	1.00	1.20	1.40	0.039	0.047	0.055
G	5.25	-	5.65	0.207	-	0.222
H	4.80	5.00	5.20	0.189	0.197	0.205
J	1.90	2.00	2.10	0.075	0.079	0.083
K	2.20	2.35	2.50	0.087	0.093	0.098
L	0.41	0.60	0.79	0.016	0.024	0.031
M	2.80	3.00	3.20	0.110	0.118	0.126
N	2.90	3.10	3.30	0.114	0.122	0.130

D	R	C
2023-11-12	R 1.0	R
2024-03-20	R 1.1	U
2024-05-17	R 1.2	U
2026-06-25	R 1.3	U

PLEASE NOTE - J J J M C ., L ("JJM") , ,
/ . I
, . T
JJM JJM'
JJM'
. P JJM
, , JJM' . A JJM
. T JJM
J J J M C ., L . T
. 2026 JJM - A