

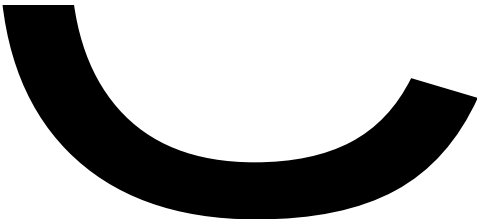
1200V 15A Trench and Field Stop IGBT

JJT15N120SE

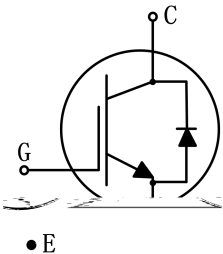
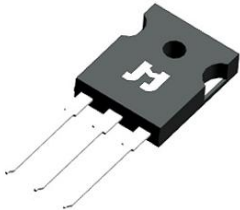
- $V_{CE}=1200V$
- $I_C=15A@T_c=100$
- $V_{CE(sat)}=1.7V$

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

- I



O-247





V_{CES} C - 1200 V



($T = 25$)

S

BV_{CES}	C -	$V_{GE}=0V, I_C=250\mu A$	1200	-	-	V
I_{CES}	C -	$V_{CE}=1200V, V_{GE}=0V$	-	-	250	μA
I_{GES}	G ,	$V_{GE}=20V, V_{CE}=0V$	-	-	100	A
	G ,	$V_{GE}=-20V, V_{CE}=0V$	-	-	-100	A
$V_{GE()}$	G -	$V_{GE}=V_{CE}, I_C=1 A$	5.7	6.2	6.5	V
$V_{CE()}$	C -	$V_{GE}=15 V, I_C=15A$	-	1.7	-	V
		$V_{GE}=15V, I_C=15A, T =175$	-	2.2	-	V

D

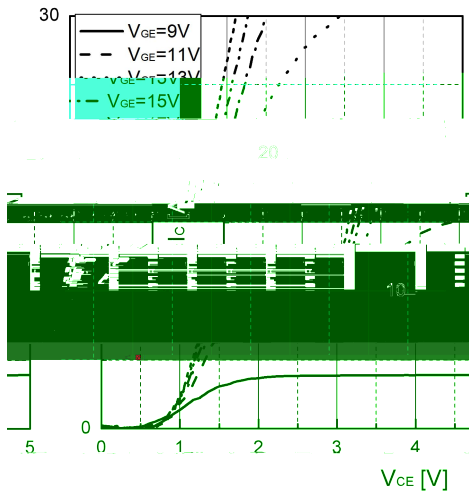
C	I	$V_{CE}=30V$ $V_{GE}=0V$ $f=1MH$	-	1250	-	F
C	O		-	58	-	F
C	R		-	13	-	F
Q	T	$V_{CC}=960V$ $V_{GE}=15V$ $I_C=15A$	-	74	-	C



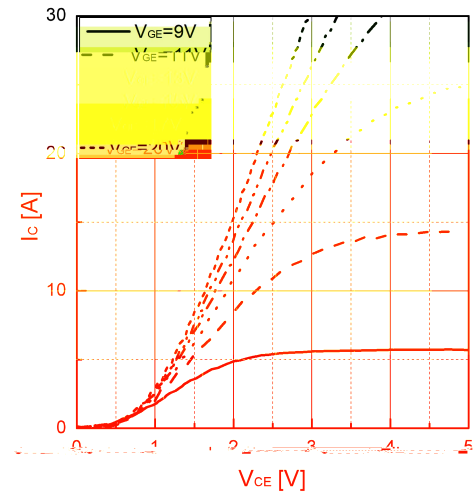


($T = 25$)

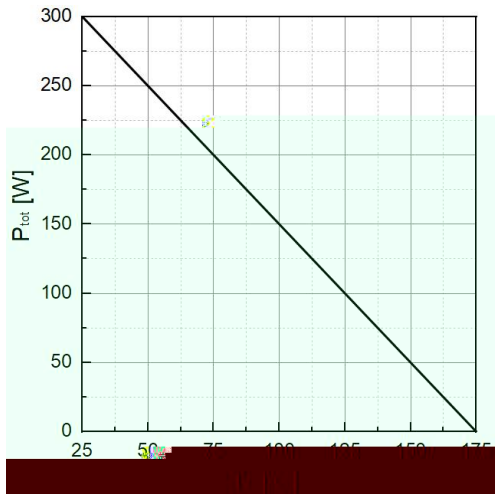
V_F	D	$I_F=15A$	-	2.3	-	V
		$I_F=15A \quad T = 175$	-	1.9	-	V
t	D	$V_R=600V$ $I_F=15A$ $i_F/ t=-250A/\mu s$	-	223	-	
I	D		-	8	-	A
Q	D		-	718	-	C
t	D	$V_R=600V$ $I_F=15A$ $i_F/ t=-250A/\mu s$ $T = 175$	-	396	-	
I	D		-	11	-	A
Q	D		-	1700	-	C



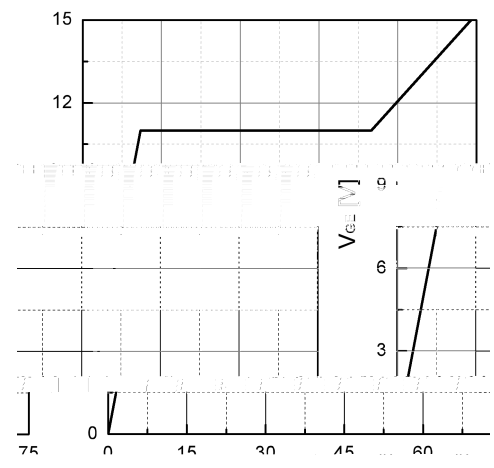
F 1. T $(T = 25 \text{ }^{\circ}\text{C})$



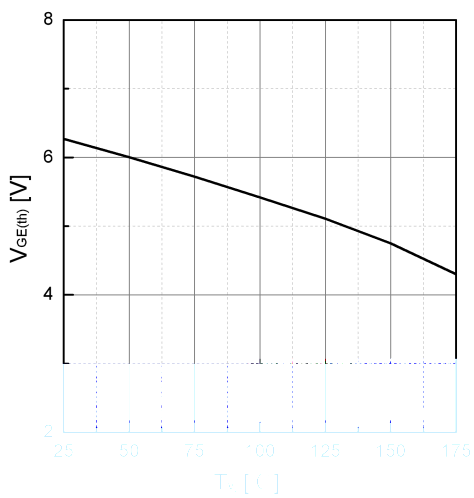
F 2. T $(T = 175 \text{ }^{\circ}\text{C})$



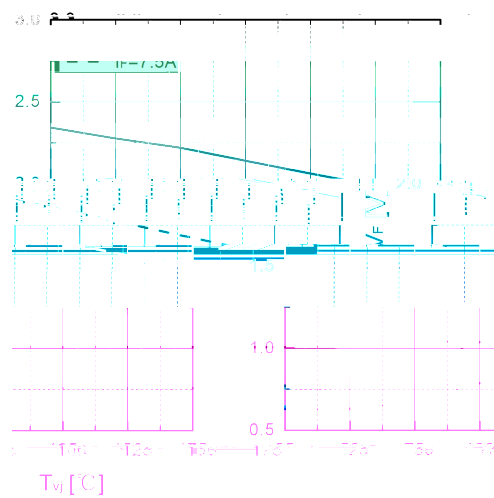
F 3. P T_C



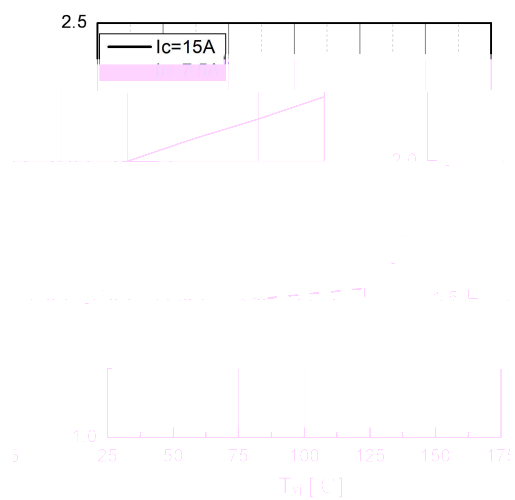
F 4. T G



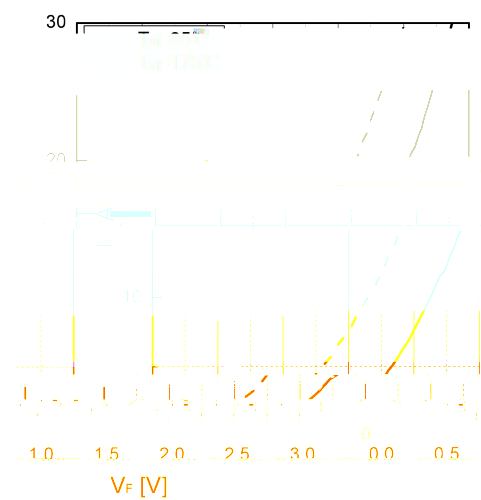
F 5. T $V_{GS(th)}$ T
($I_D = 1 \text{ A}$)



F 6. T V_F T

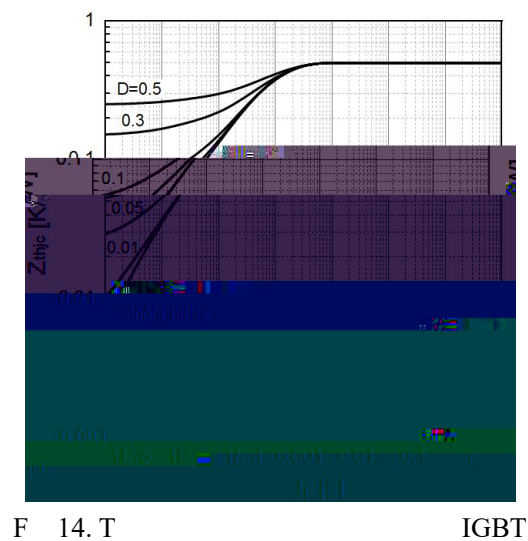
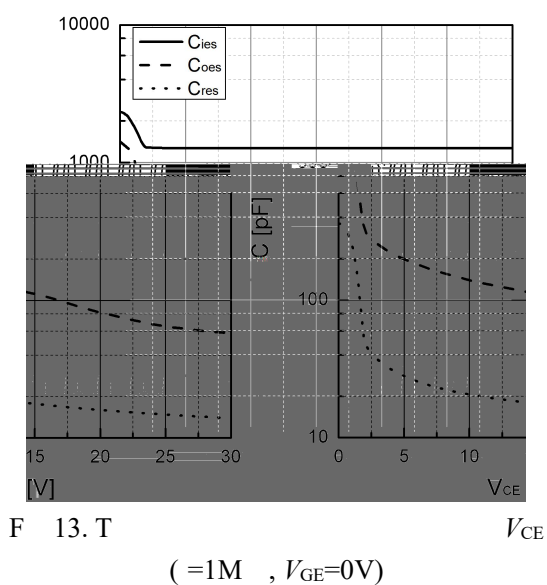


F 7.1T SFD V_{CE}



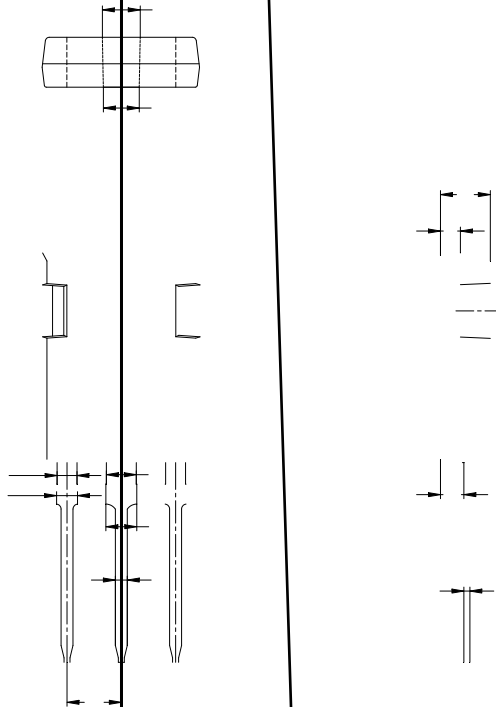
E $\sqrt{\alpha} \otimes x$

i i





TO-247



R .	I D					
	M		M .	M .	I	
	M .	T .			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
2023-12-12	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