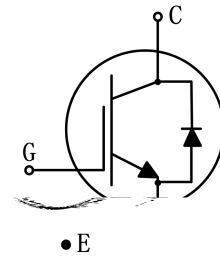
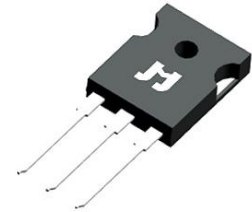


- $f_{CE} = 1200$
- $I_C = 25A @ V_{CE} = 100$
- $V_{CE(sat)} = 2.0$

-247



- -
- H
- $V_{CE(sat)}$
- F
- H

-
- I

	M		M
JJ 25 120 E	25120 E	-247	



CE	C -	1200	
GE	G -	20	
C	C (c=25)	50	A
	C (c=100)	25	A
CM	,	100	A
F	D (c=100)	25	A
FM	D ,	100	A
	(c=25)	375	
	(c=100)	187	
		-40 +175	
		-55 +150	

(-)

,

IGB





(=25)

B_{CE}	C -	$G_E=0, I_C=250 \text{ A}$	1200	-	-	
C_{CE}	C -	$C_E=1200, G_E=0$	-	-	100	A
G_E	G ,	$G_E=20, C_E=0$	-	-	100	A
	G ,	$G_E=-20, C_E=0$	-	-	-100	A
$G_E(\)$	G -	$G_E=C_E, C=1 \text{ A}$	5.3	5.8	6.8	
$C_E(\)$	C -	$G_E=15, C=25A$	-	2.0	-	
		$G_E=15, C=25A, =175$	-	2.7	-	

D

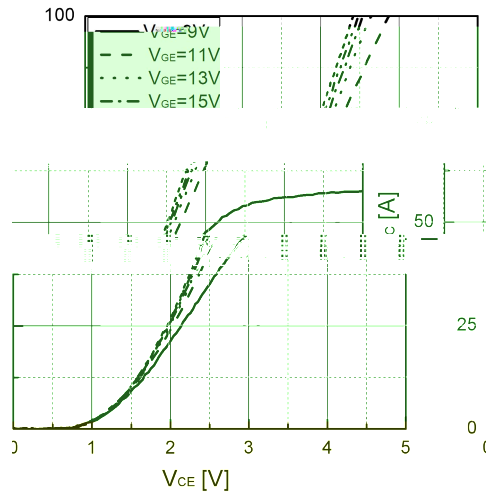
C	I	$C_E=30$ $G_E=0$ $=1MH$	-	4569	-	F
C			-	60	-	F
C			-	26	-	F
		$C_C=960$ $=15$ $C=25A$	-	146	-	C



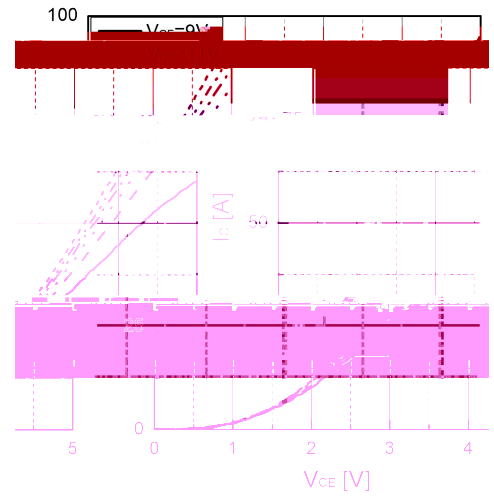
()	-	cc=600 GE=0/15 c=25A G=10Ω I	-	40	-	
			-	36	-	
()	-		-	169	-	
	F		-	68	-	
	-		-	1.4	-	J
	-		-	0.8	-	J
			-	2.2	-	J
()	-	cc=600 GE=0/15 c=25A G=10Ω I =175	-	36	-	
			-	31	-	
()	-		-	195	-	
	F		-	134	-	
	-		-	1.5	-	J
	-		-	1.1	-	J
			-	2.6	-	J



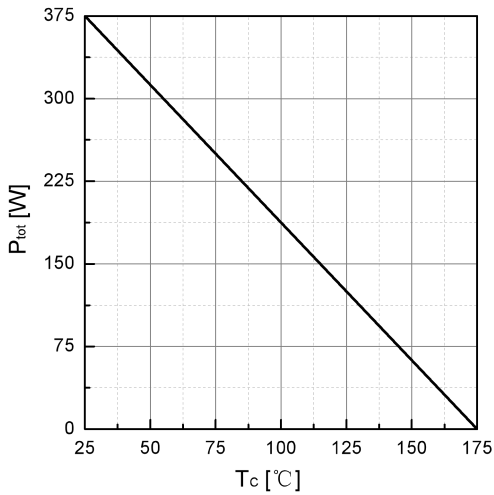
F	D	$F=25A$	-	2.6	-
		$F=25A, =175$	-	2.3	-
	D	$=600$	-	120	-
	D	$F=25A$	-	0	
		$F/ =-600A/$			



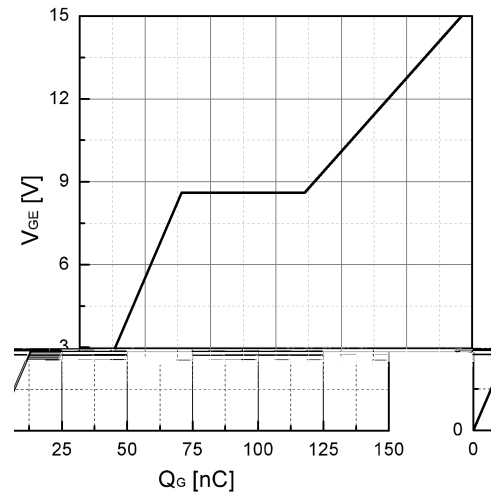
F 1. ($I_C = 25$)



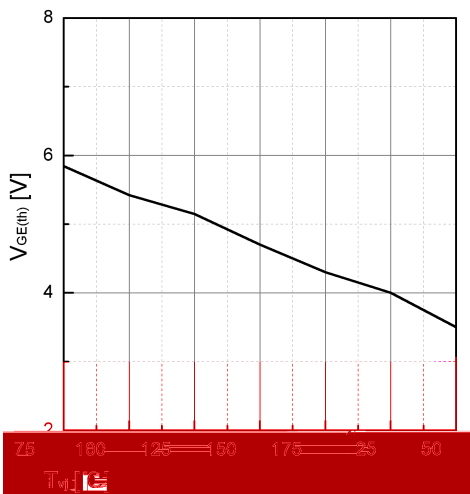
F 2. ($I_C = 175$)



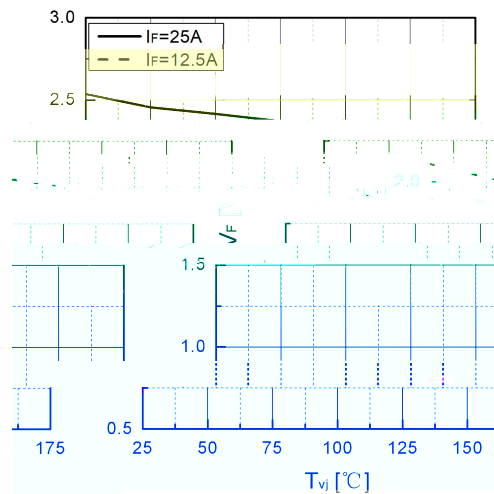
F 3. c



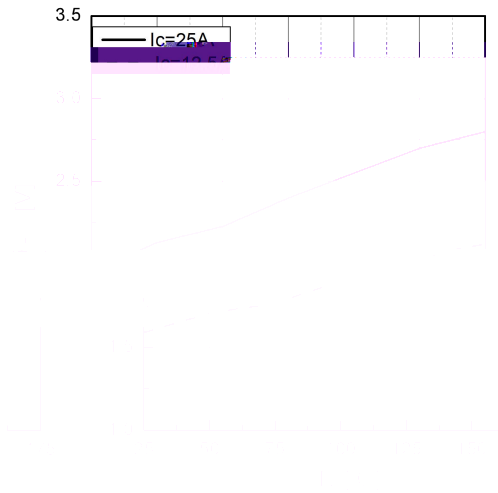
F 4. G



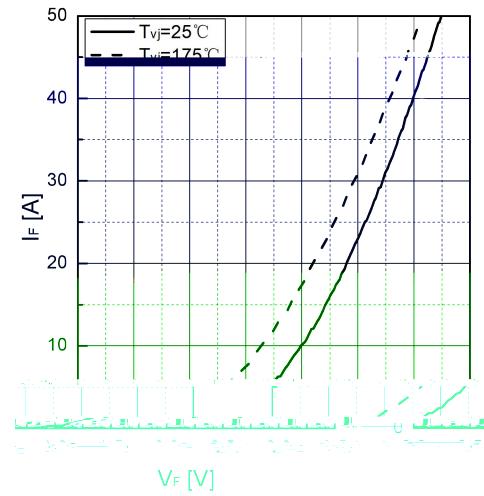
F 5. $V_{GE(th)}$ ($c=1$ A)



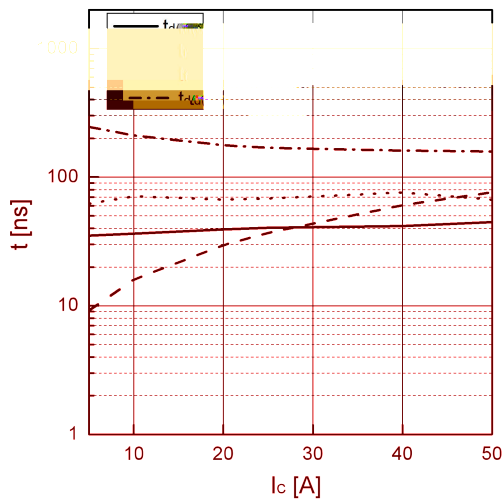
F 6. F



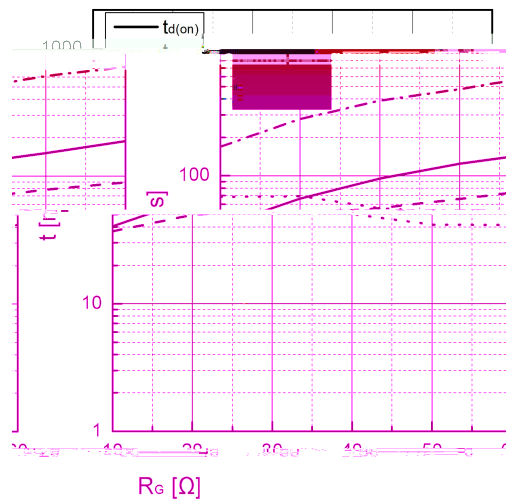
F 7. CE



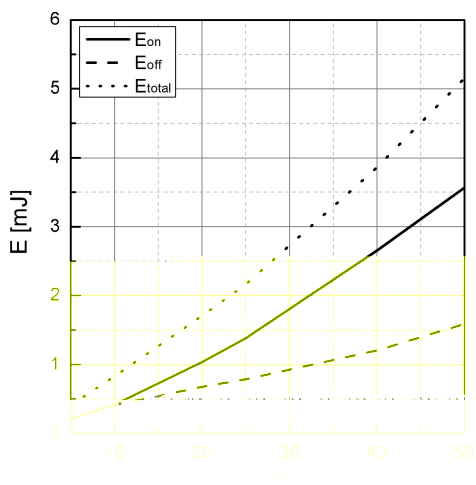
F 8. F F



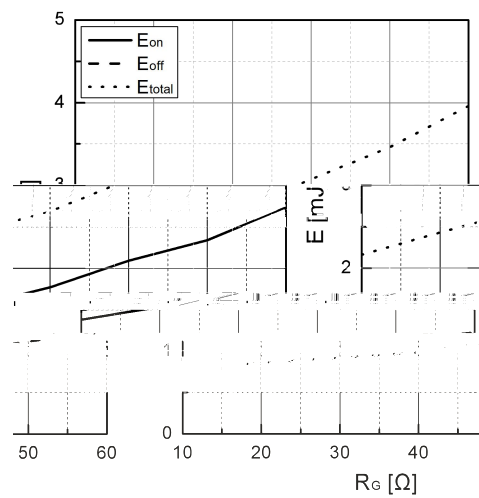
F 9. C



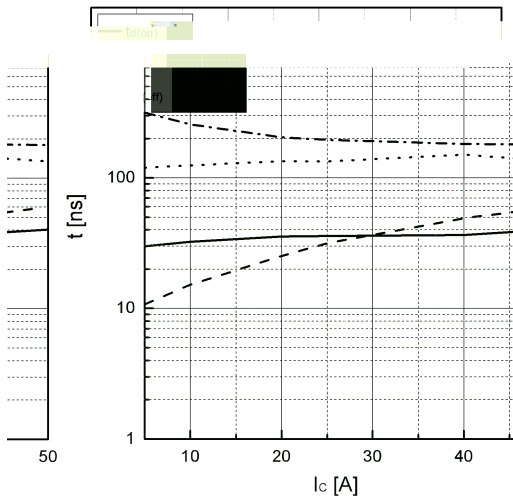
F 10. G



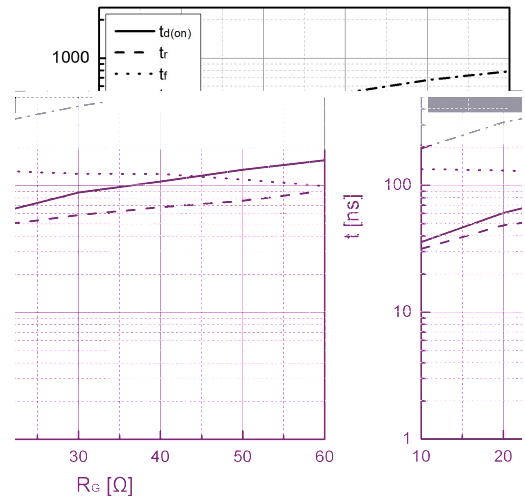
F 11. C



F 12. G



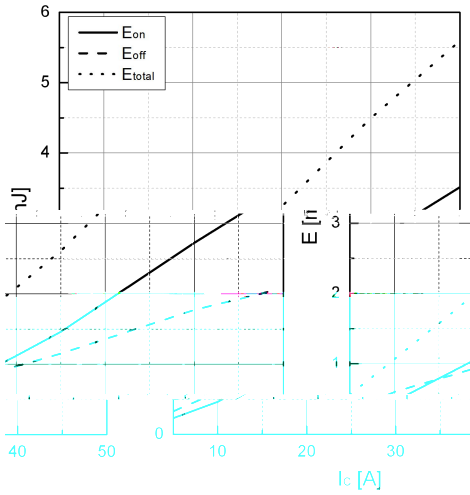
F 13.



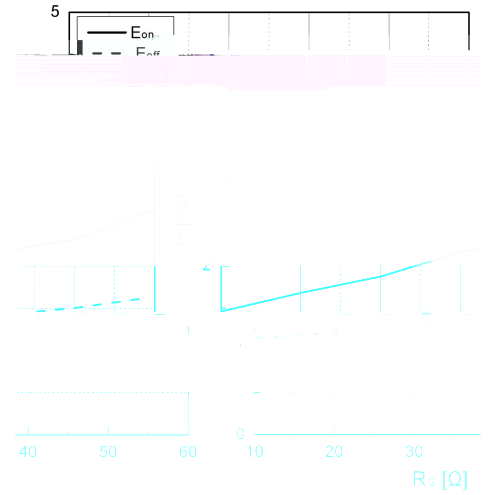
F 14.

(=175)

(=175)



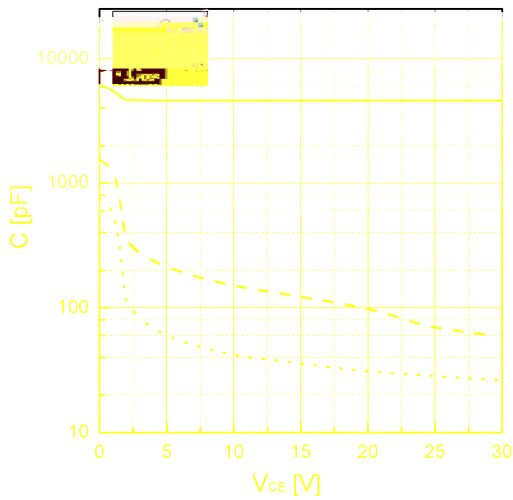
F 15.



F 16.

c(=175)

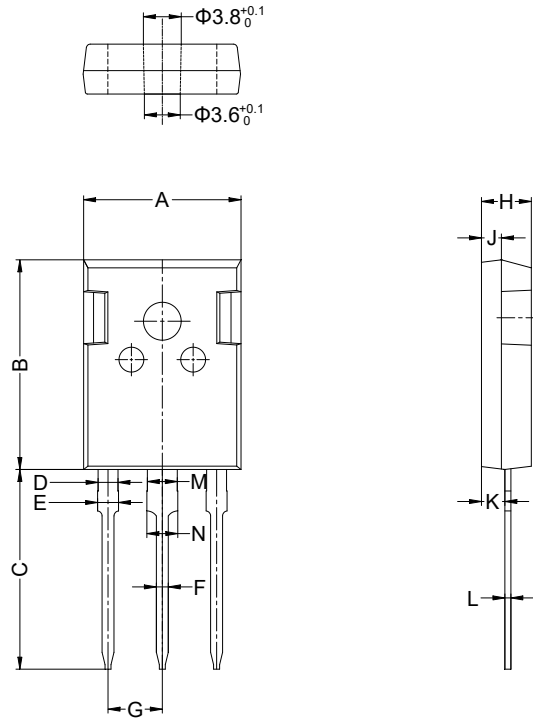
g(=175)



F 17.

CE

(=1M , GE=0)



	D					
	M			I		
	M		M	M		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
	2.90	3.10	3.30	0.114	0.122	0.130



D		C
2024-07-12	1.0	
2024-09-23	1.1	

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