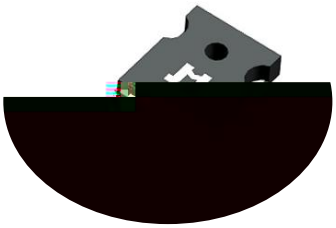
JJMICROELECTRONICS

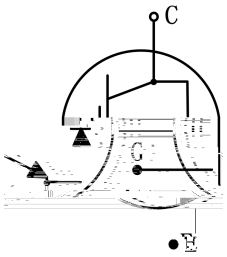
650V 40A Trench and Field Stop IGBT

JJT40N65HK

- $_{CE}$ =650V
- $_{C}$=40A@ $_{C}$=100
- $_{CE(sat)}$=1

TO-247i





V_{CES}	Collector-emitter voltage	650

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$_{CES}$	Collector-emitter breakdown voltage	$_{GE}$=0V, I_C=250μA	650	-	-	V
$_{CES}$	Collector-emitter leakage current	$_{CE}$=650V, $_{GE}$=0V	-	-	50	μA


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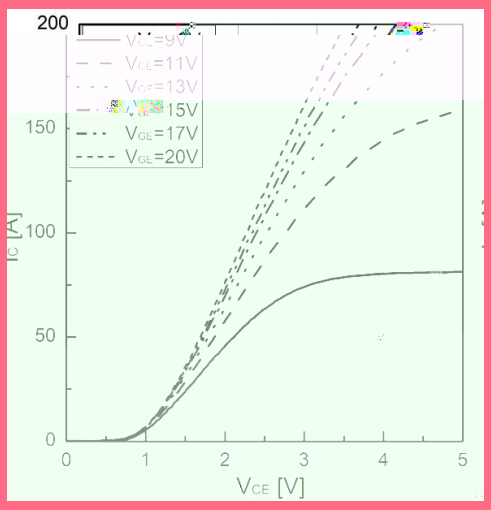


Fig 1. Typical output characteristic (vj=25)

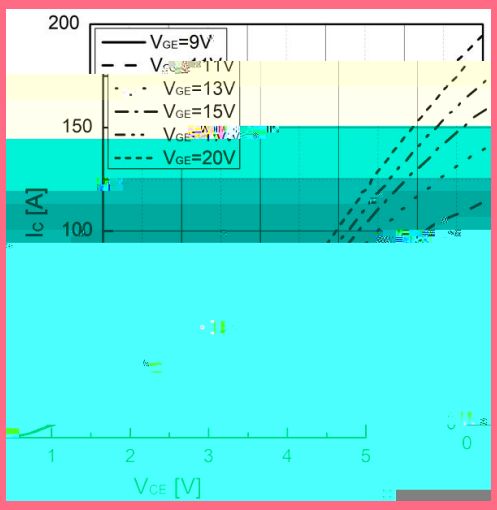


Fig 2. Typical output characteristic(vj=175)

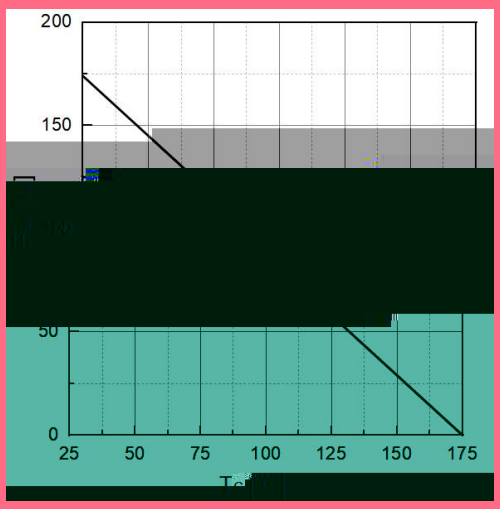


Fig 3. Power dissipation as a function of

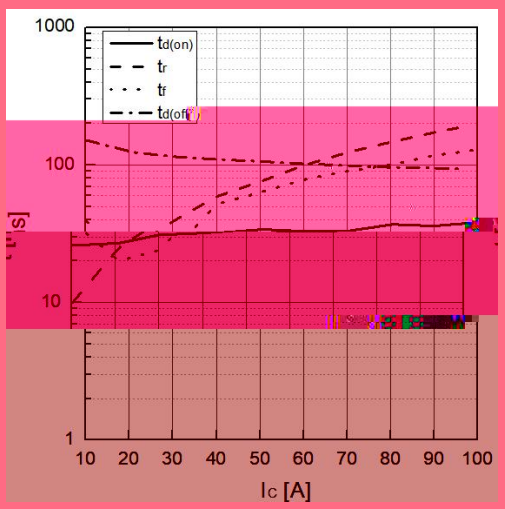


Fig 4. Typical switching time as a function of C

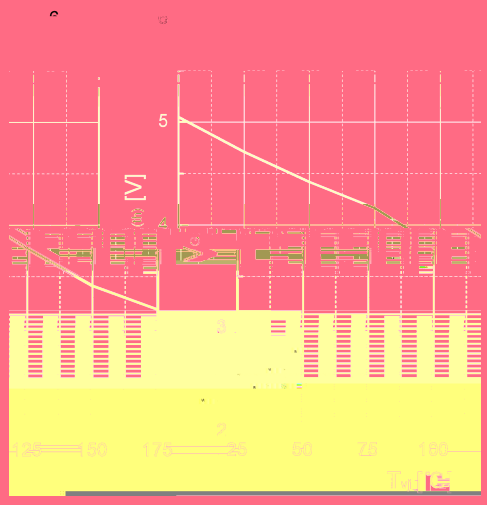


Fig 5. Typical GE(th) as a function of vj (C=1mA)

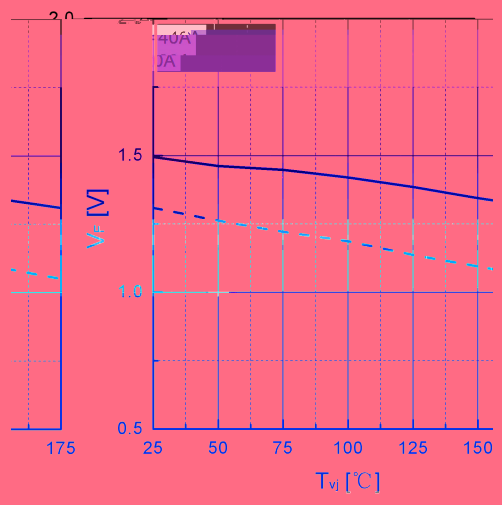


Fig 6. Typical F as a function of vj

A d c f a c ed a d bec e a d ca e .

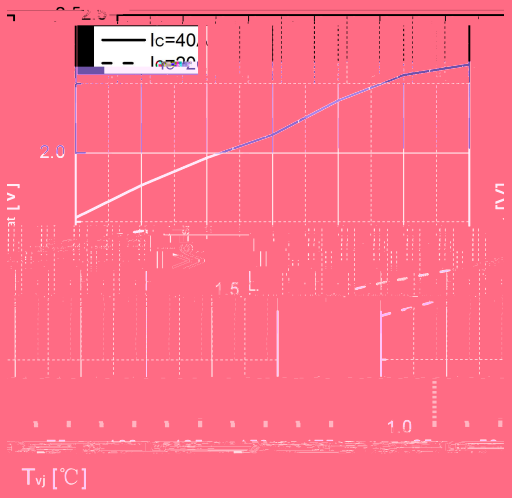


Fig 7. Typical $_{CEsat}$ as a function of $_{vj}$

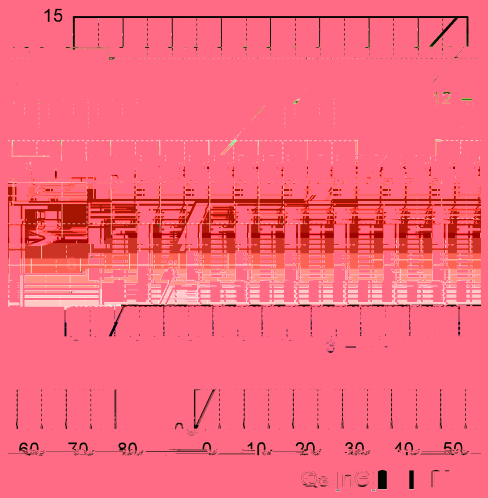


Fig 8. Typical Gate charge

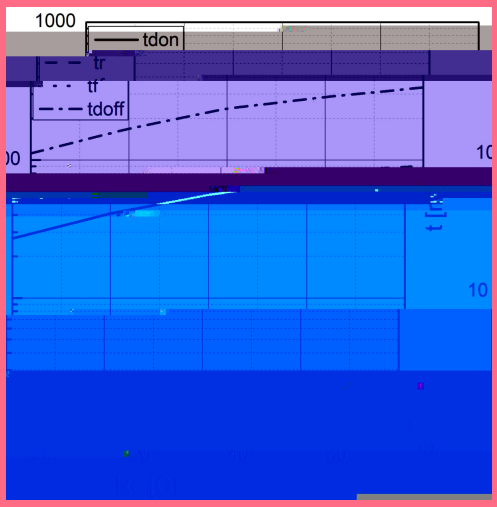


Fig 9. Typical switching times as a function of $_{G}$

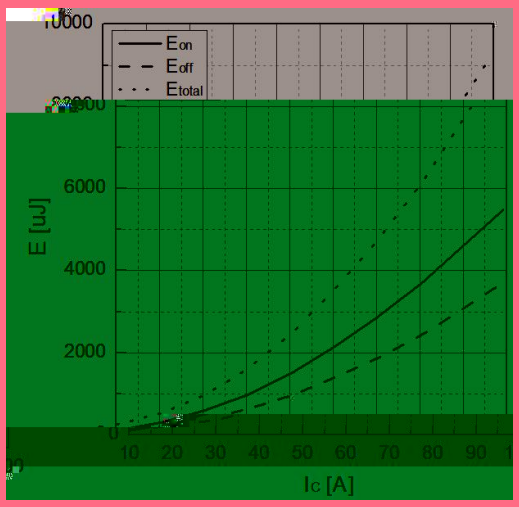


Fig 10. Typical switching energy losses as a function of $_{C}$

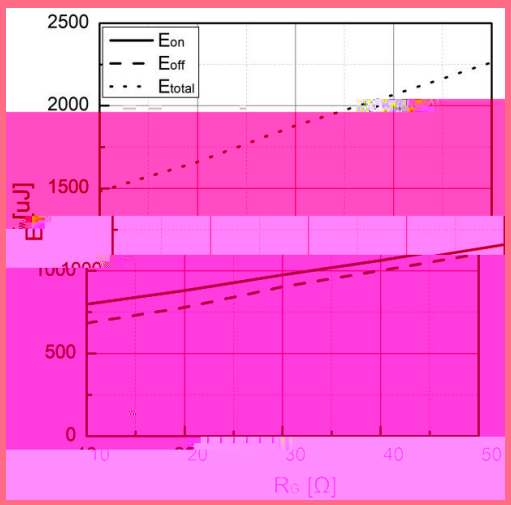


Fig 11. Typical switching energy losses as a function of $_{G}$

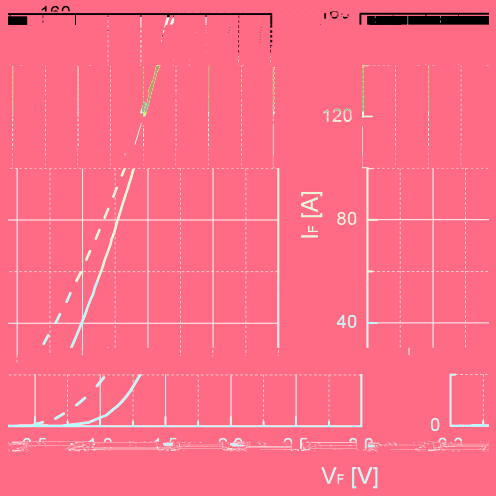


Fig 12. Typical $_{F}$ as a function of $_{F}$

A d c f a c ed a d bec e a d ca e .



A

Ref.	Dimensions					
	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	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	0.61	0.023	0.023	0.024
L1	1.85	1.90	1.95	0.072	0.074	0.076

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Date	Revision	Changes
2024-10-22	Rev 1.0	Release of the datasheet
2025-01-18	Rev 1.1	Modify Rth
2026-06-25	Rev 1.2	Update thermal

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