



JIEJIE MICROELECTRONICS CO., LTD.

Average gate power dissipation ($T_j=125$)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{pp}	0.7	kV

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	$V_D=12V$ $R_L=33$	-	-	10	mA
V_{GT}		-	-	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$	0.2	-	-	V
I_L	$I_G=1.2I_{GT}$	-	-	40	mA
I_H	$I_T=500mA$	-	-	30	mA
dV/dt	$V_D=400V$ Gate Open $T_j=125$	1000	-	-	V/ μs
t_{on}	$I_G=20mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$	-	3	-	μs
t_{off}		-	50	-	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=20A$ $t_p=380\mu s$	$T_j=25$	1.55	V
V_{TO}	Threshold voltage	$T_j=125$	0.772	V
R_D	Dynamic resistance	$T_j=125$	26.5	m
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	μA
I_{RRM}		$T_j=125$	0.2	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
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ORDERING INFORMATION

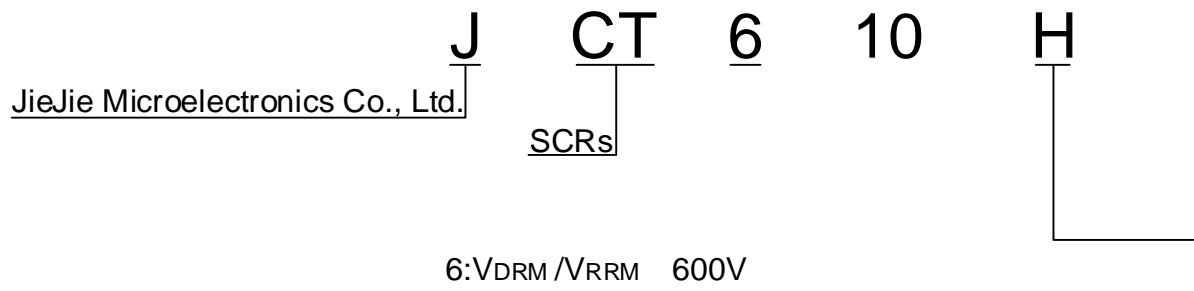
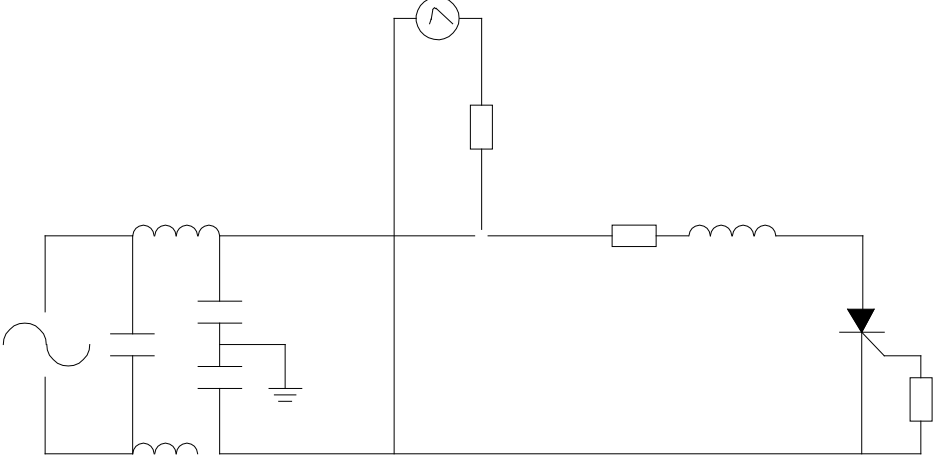


FIG.1: Maximum power dissipation versus RMS on-state current



FIG.2: RMS on-state current versus case temperature

FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.




ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT610H	600	10	TO-251	80	Tube

Document Revision History

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last update
Oct.16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

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