



**JIEJIE MICROELECTRONICS CO., LTD.**

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TEL

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/ $\mu s$
$t_{on}$	$I_G=20mA I_A=200mA I_R=20mA$ $T_j=25$	-	3	-	$\mu s$
$t_{off}$		-	50	-	

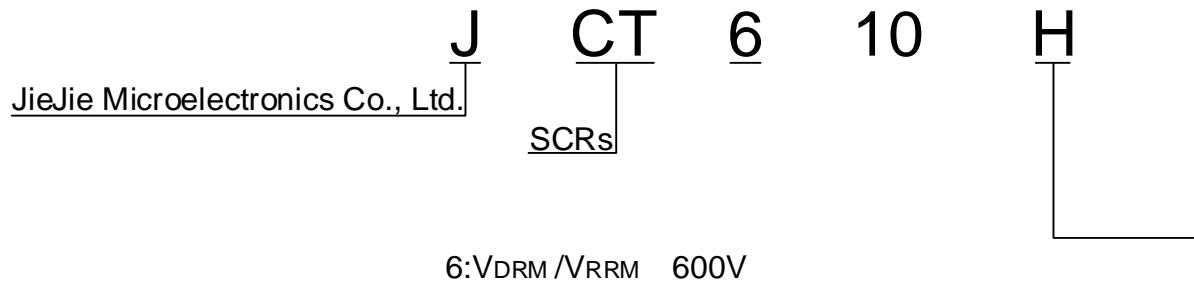
**STATIC CHARACTERISTICS**

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	$\mu A$
$I_{RRM}$		$T_j=125$	0.2	mA

**THERMAL RESISTANCES**

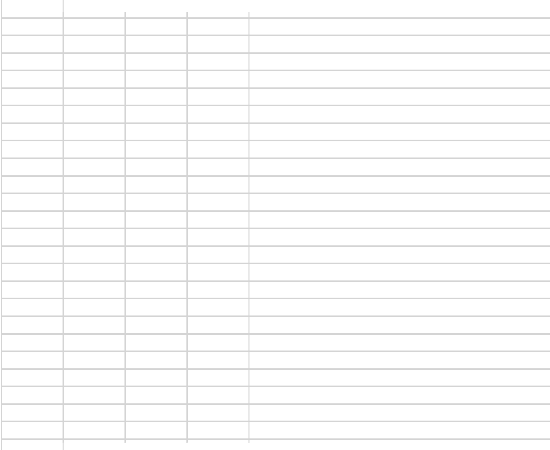
Symbol	Parameter	Value	Unit
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ORDERING INFORMATION



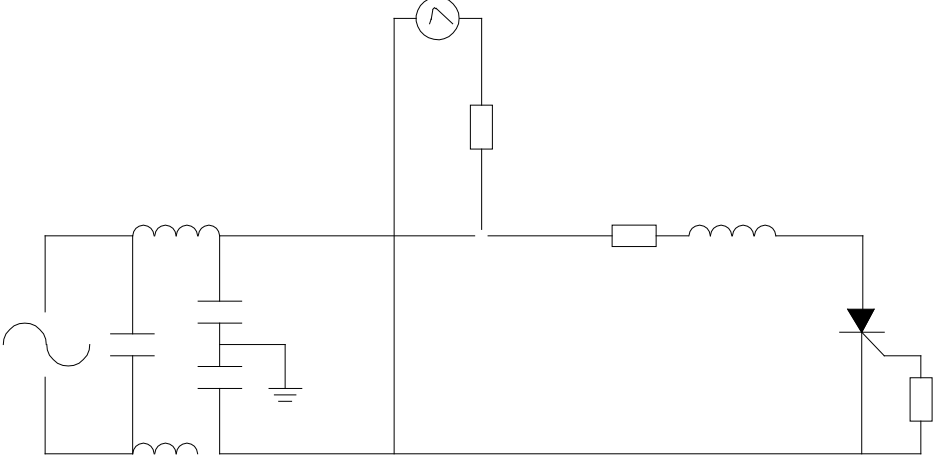
# JCT610H

**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**


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

**Document Revision History**

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



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