



JR0205H

2A SCR

Rev.A.1.0

The JR0205H SCR with the parallel resistor between Gate and Cathode,  $R_{GK}$  is especially recommended for use on straight hair, igniter, anion generator, etc. Package TO-251 is RoHS compliant.

Symbol	Value	Unit
$I_{T(RMS)}$	2	A
$V_{DRM}/V_{RRM}$	600	V
$I_{GT}$	200	A

Parameter	Symbol	Value	Unit
Storage junction temperature range	T		

Peak gate power	$P_{GM}$	2	W
Peak pulse voltage ( $T_j=25$ ; non-repetitive,off-state;FIG.7)	$V_{pp}$	0.5	kV

**NOTE 1:** When we parallel connect a 1K resistor between Gate and Cathode, the  $T_j$  can reach 125 ; if without this resistor, the  $T_j$  only can reach 110 .

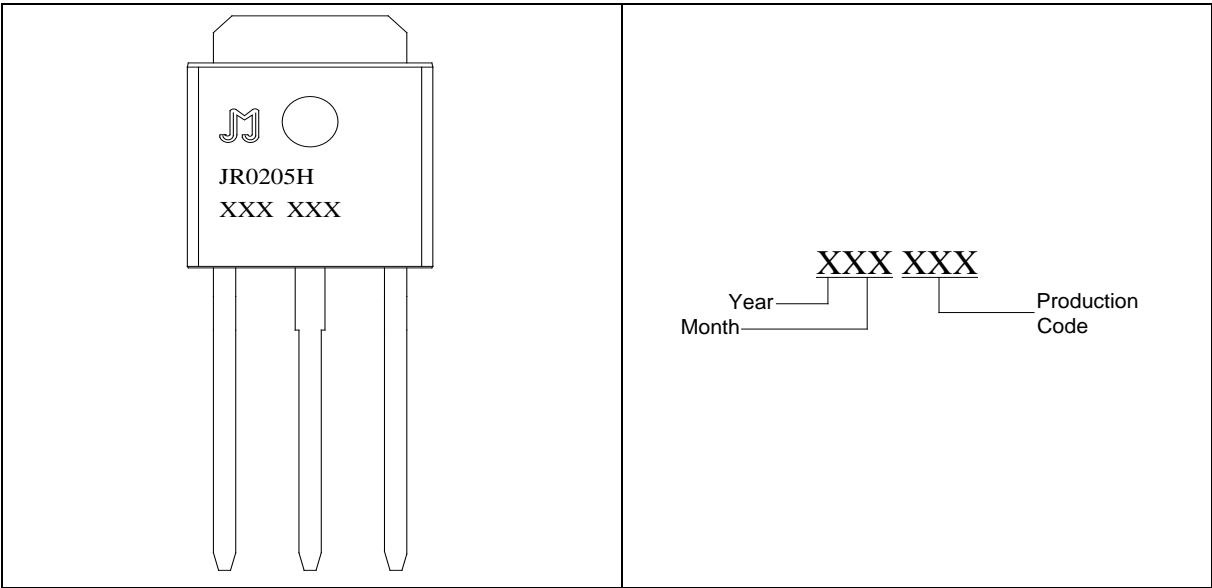
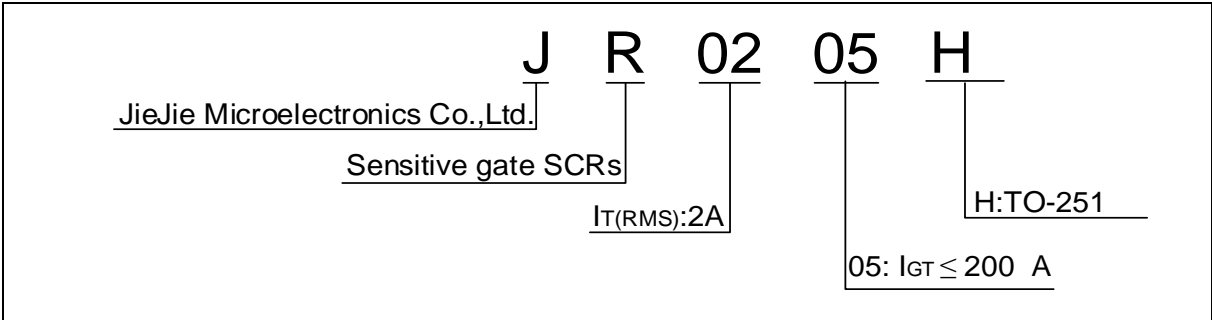
( $T_j=25$  unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
$I_{GT}$	$V_D=12V R_L=33$	-	40	200	A
$V_{GT}$		-	0.5	0.8	V
$V_{GD}$	$V_D=V_{DRM} T_j=125$	0.2	-	-	V
$I_L$	$I_G=1.2 I_{GT}$	-	-	3	mA
$I_H$	$I_T=0.05A$	-	-	2	mA
dV/dt	$V_D=400V T_j=125 R_{GK}=1K$	50	-	-	V s
	$V_D=400V T_j=125 R_{GK}=220$	250	-	-	
$t_{on}$	$I_G=10mA I_A=20mA I_R=2mA$	-	2	-	s
$t_{off}$	$T_j=25$	-	50	-	

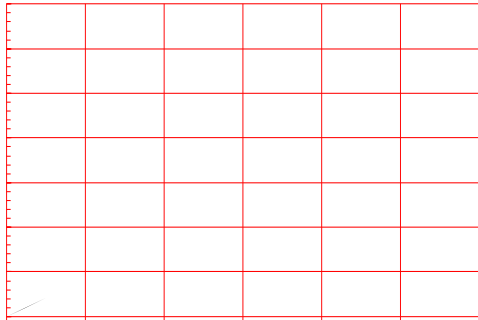
Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=4A t_p=380 s$	$T_j=25$	1.5	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.73	V
$R_D$	Dynamic resistance	$T_j=125$	0.14	
$I_{DRM}$	$V_D=V_{DRM} V_R=V_{RRM}$	$T_j=25$	5	A
$I_{RRM}$		$T_j=125$	0.2	mA

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (DC)	8	/W
$R_{th(j-a)}$	junction to ambient (DC)	120	/W

TEL:



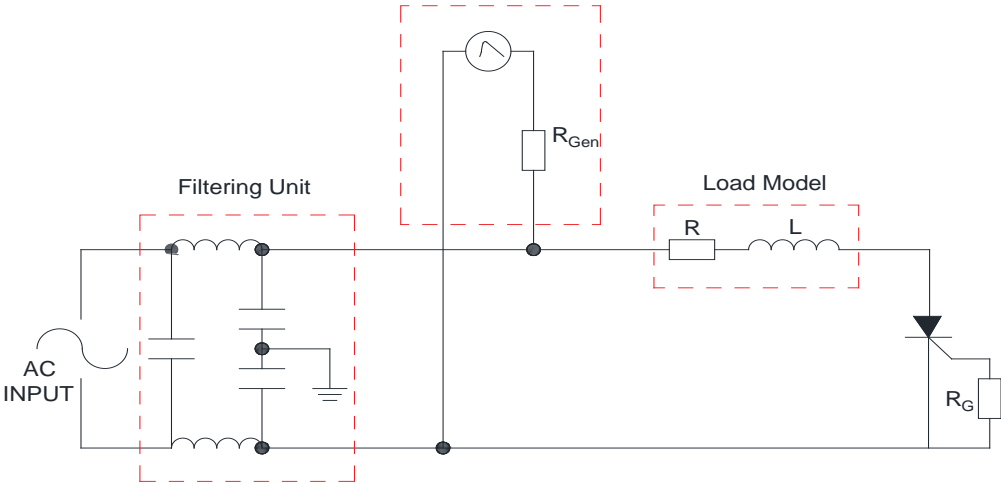
**FIG.1** Maximum power dissipation versus RMS on-state current



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

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

IEC61000-4-5 Standards  
Surge Generator



Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT )	Package	Base qty. (pcs)	Delivery mode
JR0205H	600	200	TO-251	80	Tube

**Document Revision History**

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last update

