



JR0805K 8A SCR

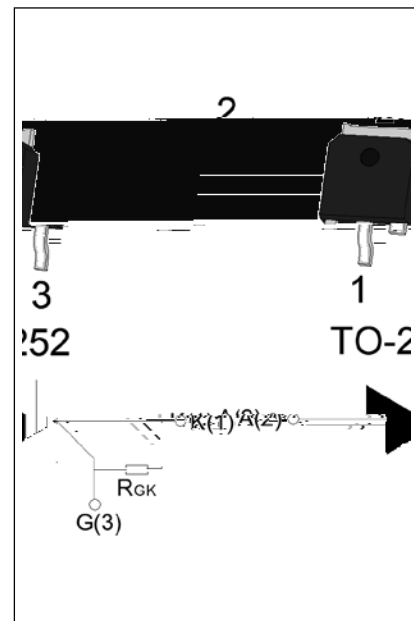
Rev. A.1.1

DESCRIPTION:

The JR0805K SCR with the parallel resistor between Gate and Cathode, $R_{GK}=10\sim 80k$ is especially recommended for use on straight hair, igniter, anion generator, etc. Package TO-252 is RoHS compliant.

MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	600	V
I_{GT}	200	μA



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage ($T_j=25^\circ C$)	V_{DRM}	600	V
Repetitive peak reverse voltage ($T_j=25^\circ C$)	V_{RRM}	600	V
Average on-state current ($T_c=76^\circ C$)	$I_{T(AV)}$	5	A
RMS on-state current ($T_c=76^\circ C$)	$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current ($t_p=10ms, T_j=25^\circ C$)	I_{TSM}	80	A
Non repetitive surge peak on-state current ($t_p=8.3ms, T_j=25^\circ C$)		88	
I^2t value for fusing ($t_p=10ms, T_j=25^\circ C$)	I^2t	32	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}, f=100Hz, T_j=125^\circ C$)	di/dt	50	$A/\mu s$
Peak gate current ($t_p=20\mu s, T_j=125^\circ C$)	I_{GM}	4	A
Average gate power dissipation ($T_j=125^\circ C$)	$P_{G(AV)}$	1	W

Peak gate power	P_{GM}	5	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, off-state; FIG.8)	V_{pp}	0.5	kV

NOTE 1: Operating junction temperature T_j is up to 125°C when a resistor $1\text{k}\Omega$ is connected between Gate and Cathode. Without this resistor, the T_j is up to 110°C only.

ELECTRICAL CHARACTERISTICS ($T_j=25^\circ\text{C}$ unless otherwise specified)

Sym	Test Con	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	$V_D=12\text{V}$ $R_L=33\Omega$ GT				

ORDERING INFORMATION

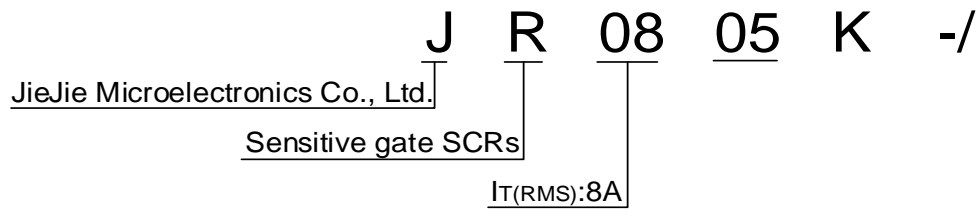


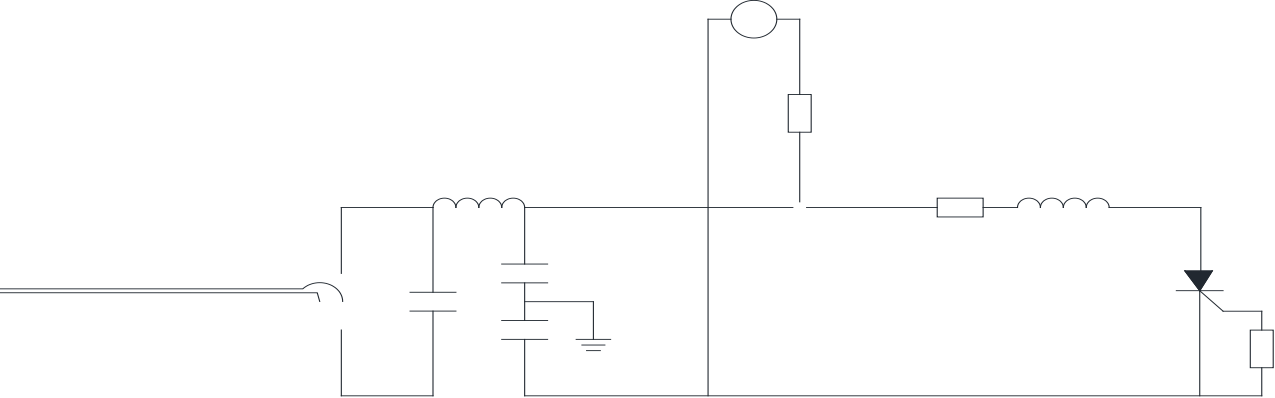
FIG.1: Maximum power dissipation versus
RMS on-state current

FIG.2:

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature



FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



ORDERING INFORMATION

Order	V _{bag} V _{DRM} /V _{R_{RRM}} (V)	IGT \$	Package	Base Qty (p)	Delivery
JR0805K	600	200	TO-252	80	Tube
JR0805K-TR				2,500	Tap & Re

~~Data~~ Revision History

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last update
Oct.22, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

Information furnished in this document is believed to be accurate and reliable.
However, Jiangsu JieJie Microelectronics Co., Ltd. nattd