



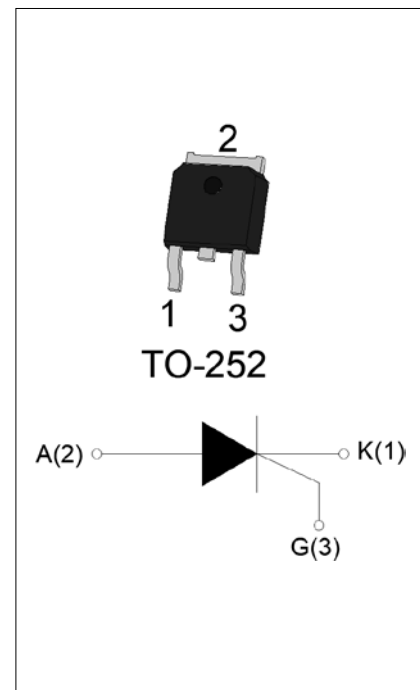
DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT151K-650R of silicon controlled rectifiers provides high dV/dt rate with strong resistance to electromagnetic interference.

It is especially recommended for use on solid state relay, motorcycle, power charger, T-tools etc. Package TO-252 is RoHS compliant.

MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	12	A
V_{DRM}/V_{RRM}	650	V
I_{GT}	"15	mA



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 ($T_j=25^\circ\text{C}$)	V_{DRM}	650	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)	V_{RRM}	650	V
Average on-state current ($T_c=49^\circ\text{C}$)	$I_{T(AV)}$	7.5	A
RMS on-state current ($T_c=49^\circ\text{C}$)	$I_{T(RMS)}$	12	A
Non repetitive surge peak on-state current ($t_p=10\text{ms}$, $T_j=25^\circ\text{C}$)	I_{TSM}	120	A
Non repetitive surge peak on-state current ($t_p=8.3\text{ms}$, $T_j=25^\circ\text{C}$)		132	
I^2t value for fusing ($t_p=10\text{ms}$, $T_j=25^\circ\text{C}$)	I^2t	72	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}$, $f=100\text{Hz}$, $T_j=125^\circ\text{C}$)	di/dt	100	A/s
Peak gate current ($t_p=20\text{s}$, $T_j=125^\circ\text{C}$)	I_{GM}	4	A



Average gate power dissipation ($T_j=125^\circ\text{C}$)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, off-state)		70.68	V

ORDERING INFORMATION

<u>J</u>	<u>CT</u>	<u>151</u>	<u>K</u>	<u>-650R</u>	<u>-/</u>
JieJie Microelectronics Co., Ltd.	SCRs	$I_{T(RMS)}:12A$	K:TO-252	650R: V_{DRM}/V_{RRM} 650V	Blank:Tube -TR:Tape & Reel

MARKING

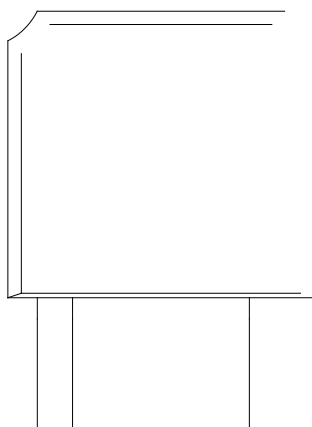


FIG.1: Maximum power dissipation versus
RMS on-state current

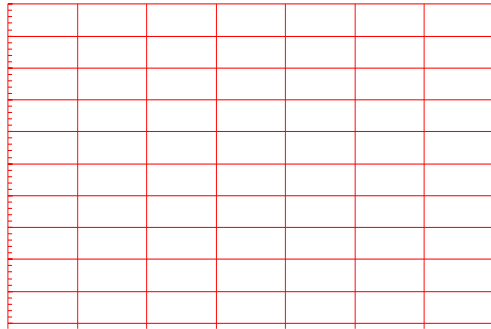


FIG.2: RMS on-state current versus case
temperature

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

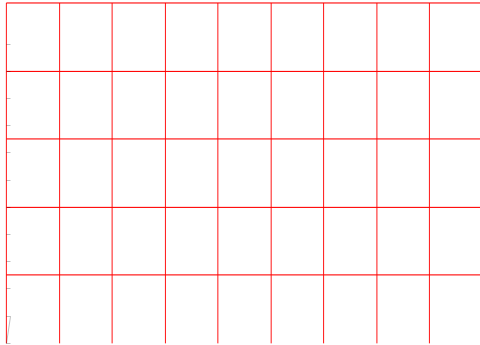
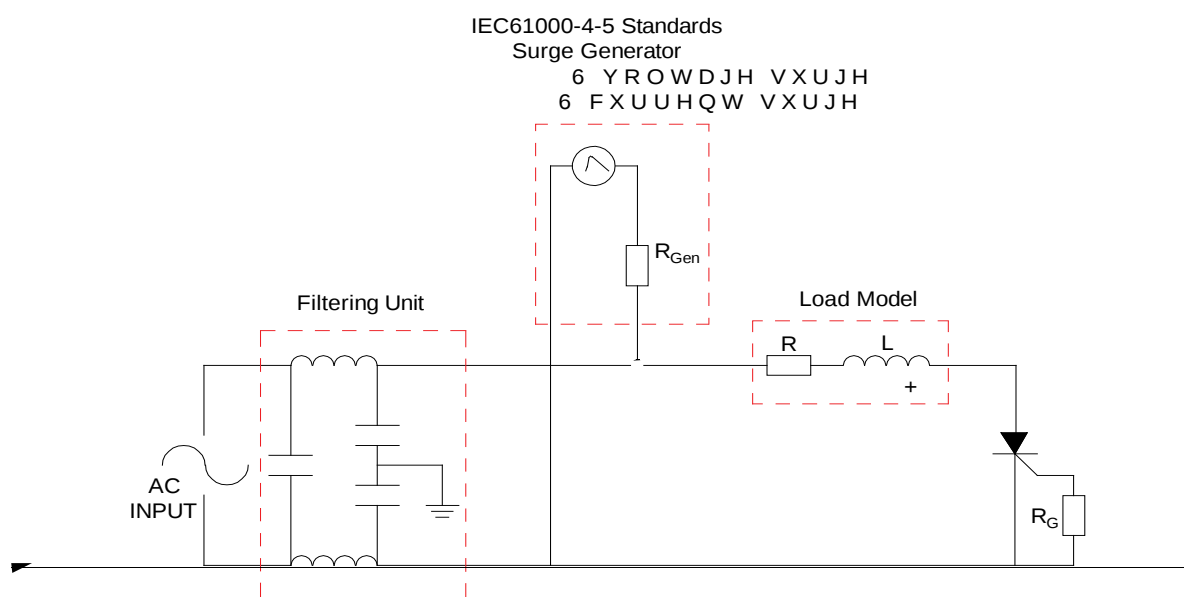


FIG.8: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



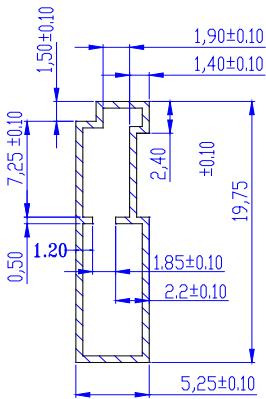
ORDERING INFORMATION

Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(
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JCT151K-650R

JieJie M

DELIVERY MODE



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