



Rev.A.1.1

With high ability to withstand the shock loading of large current, JCT625E SCR 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-263 is RoHS compliant.

Symbol	Value	Unit
$I_{T(RMS)}$	25	A
V_{DRM}/V_{RRM}	600	V
I_{GT}	20	mA

Parameter	Symbol	Value	Unit
Storage	3Tj /TT1 4J EMC ET 70.68[-l 4.1w 3.615 0BDC 5.62 0 Td 2.0-4 (		

Peak gate power	P_{GM}	20	W
Peak pulse voltage ($T_j=25$; non-repetitive,off-state;FIG.8)	V_{pp}	0.5	kV

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

Symbol	Test Condition	Value			Unit
		MIN.	(TYP)	MAX.	
I_{GT}	$V_D=12V$ $R_L=33$	-	-	20	mA

ORDERING INFORMATION

<u>J</u>	<u>CT</u>	<u>6</u>	<u>25</u>	<u>E</u>	<u>-/</u>
JieJie Microelectronics Co., Ltd.	SCRs			E:TO-263	Blank:Tube -TR:Tape & Reel
	6:V _{DRM} /V _{RRM} 600V		I _{T(RMS)} :25A		

MARKING

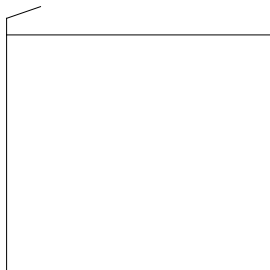


FIG.1: Maximum power dissipation versus RMS on-state current

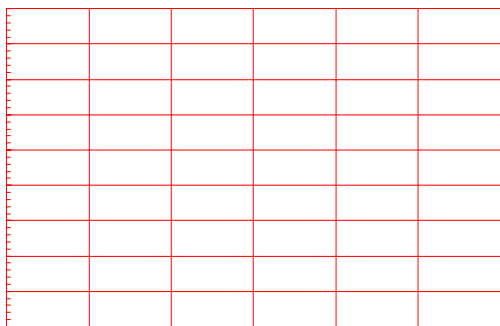


FIG.2: RMS on-state current versus case temperature

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

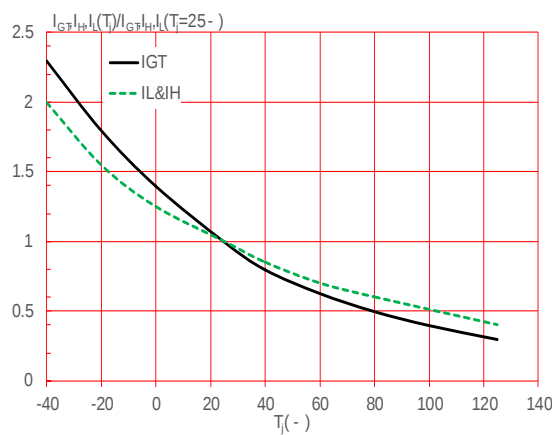
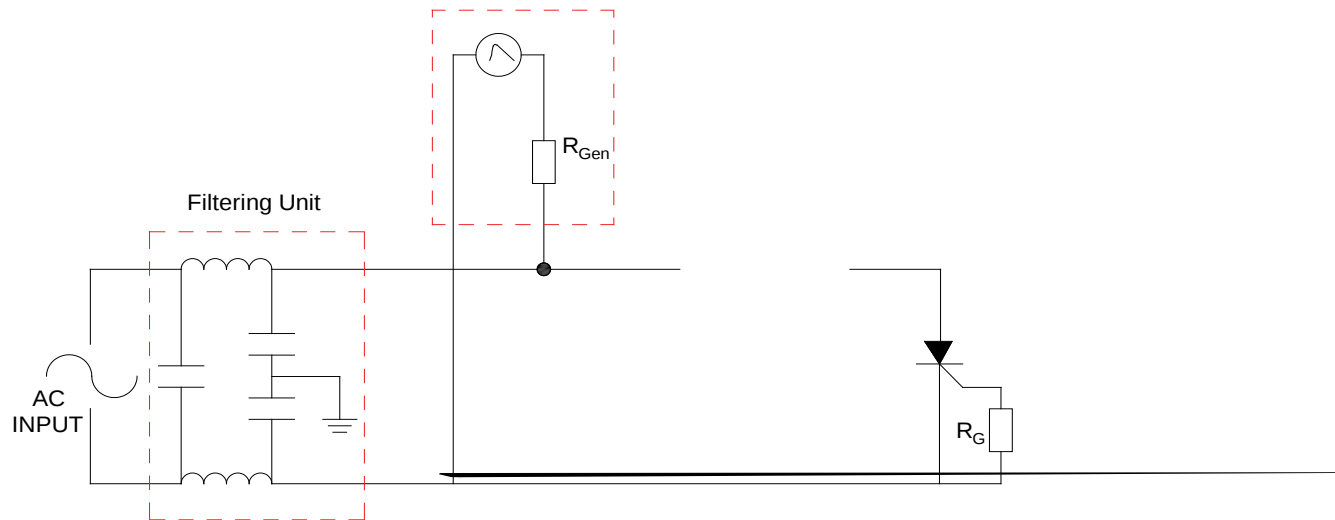


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.

IEC61000-4-5 Standards
Surge Generator

ORDERING INFORMATION

Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT625E	600	20	TO-263	50	Tube
JCT625E-TR				800	Tape & Reel

Document Revision History

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

