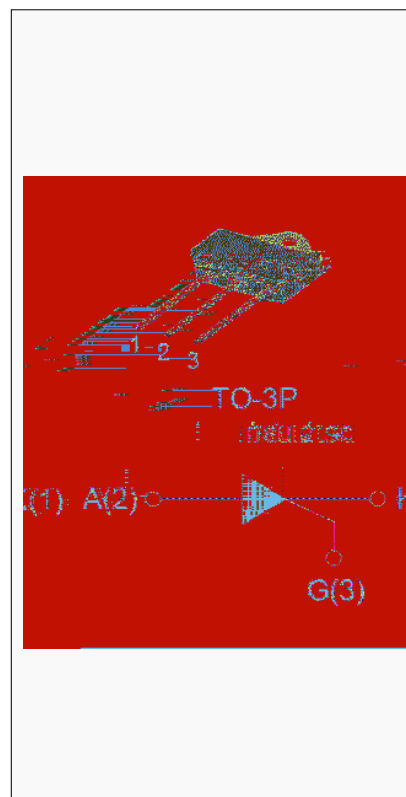




DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT1655Z SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, motorcycle, SVC, power charger, T-tools etc. From all three terminals to external heatsink, JCT1655Z provides a rated insulation voltage of 2500 V_{RMS}, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.



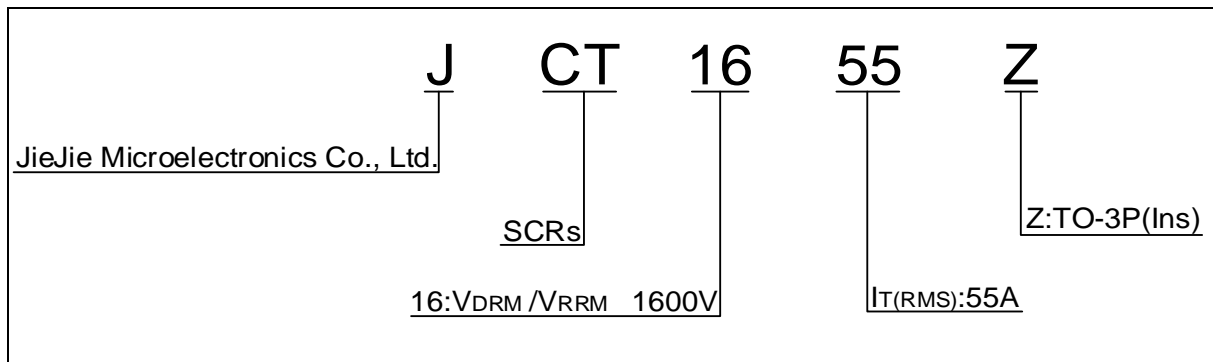
MAIN FEATURES

Symbol	Value	Unit
I _{T(RMS)}	55	A
V _{DRM} /V _{RRM}	1600	V
I _{GT}	10-80	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 °C)	V _{DRM}	1600	V
Repetitive peak reverse voltage (T _j =25 °C)	V _{RRM}	1600	V
Average on-state current (T _c = 70 °C)	I _{T(AV)}	35	A
RMS on-state current (T _c = 70 °C)	I _{T(RMS)}	55	A
Non repetitive surge peak on-state current (t _p =10ms, T _j =25 °C)	I _{TSM}	600	A
Non repetitive surge peak on-state current (t _p =8.3ms, T _j =25 °C)		640	
I ² t value for fusing (t _p =10ms, T _j =25 °C)	I ² t	1800	A ² s
Critical rate of rise of on-state current (I _G =2 I _{GT} , f=100Hz, T _j =125 °C)	di/dt	200	A/μs

ORDERING INFORMATION



MARKING

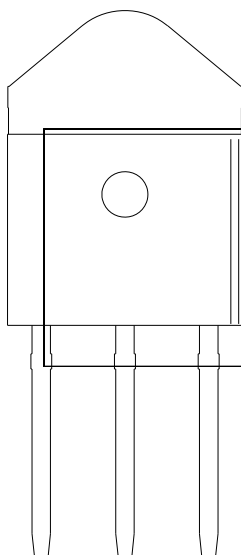


FIG.1: Maximum power dissipation versus RMS on-state current

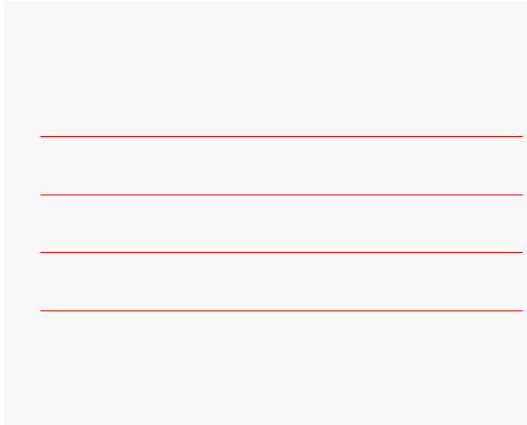
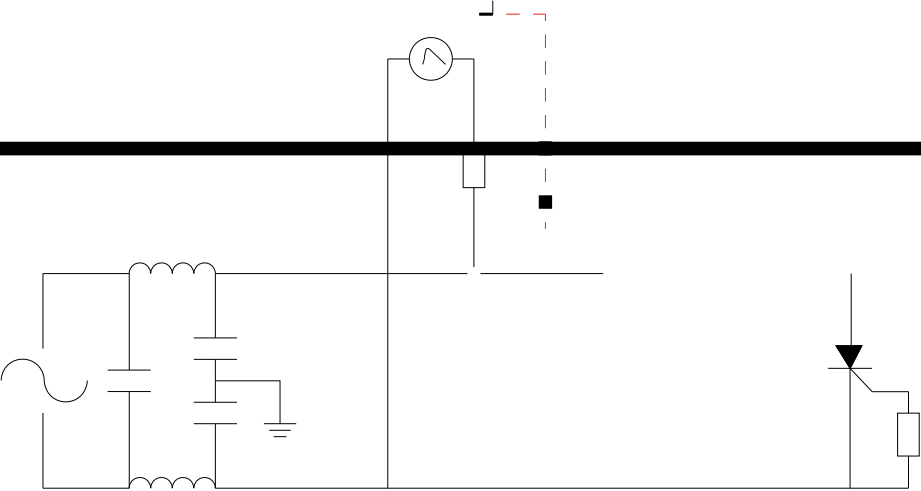


FIG.2: RMS on-state current versus case temperature

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



ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT1655Z	1600	10-80	TO-3P(Ins)	30	Tube

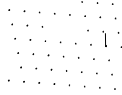
Document Revision History

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


JCT1655Z

 **JieJie Microelectronics Co., Ltd.**

PACKAGE MECHANICAL DATA



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement. Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.

 is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd. Copyright © 2025 Jiangsu JieJie Microelectronics Co., Ltd. All rights reserved.