

JIEJIE MICROELECTRONICS CO., LTD.

J20GxxxM3LK Gas Discharge Tube

Rev.1.3

FEATURE

- ♦ Eliminates small size design EIA 10.0×8.0mm.
- → Current handling capability 20kA @ 8/20µs.
- ♦ Low capacitance and insertion loss.
- Fast response and long service life.
- ♦ Reliable to protect electrostatic surge.
- ♦ Storage and operating temperature -40~+85°C.
- ♦ Moisture sensitivity level: Level 1.



Exterior



Schematic symbol

APPLICATION INFORMATION

- ♦ Repeaters, modems.
- ♦ Telephone interface, line cards.
- ♦ Data communication equipment.
- ♦ Line test equipment.
- ♦ Power supplies

ELECTRICAL CHARACTERISTICS

Part number	DC breakdown Tolerance	Impulse spark-over	Impulse discharge	Insulation resistance		Со	
	voltage 100V/s(V)	of Vs	voltage 1KV/µs(V)	current 8/20µs(kA)	GΩ	DC(V)	(1MHz)
J20G091M3LK	90	±20%	≤700	20	≥1	50	≤1.5pF
J20G231M3LK	230	±20%	≤900	20	≥1	50	≤1.5pF
J20G471M3LK	470	±20%	≤1100	20	≥1	100	≤1.5pF

- 1. The parameters of all tested by ITU-T K12.
- 2. Total Impulse discharge current 20kA@ 8/20µs by IEC 61000-4-5, 10 shots.
- 3. The capacitance is tested by 1MHz@DC=0.5V.



PART NUMBERING SYSTEM

<u>J20G</u> <u>091</u> <u>M</u> <u>3L</u> <u>K</u> (1) (2) (3) (4) (5)

(1)JieJie 20kA gas discharge tube

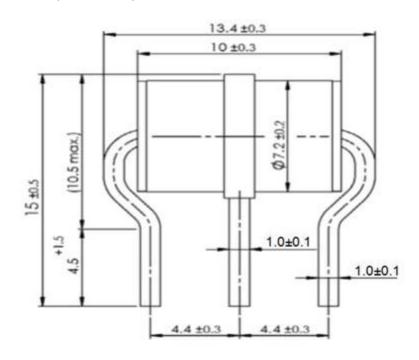
(2) DC breakdown voltage, e.g., 091=9×10¹=90V

(3) Tolerance is DC breakdown voltage, M=+-20%, N=+-30%

(4) 3-electrod DIP

(5) Dimension in 13.4×10.0×7.2 (mm)

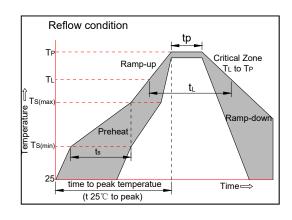
PRODUCT DIMENSIONS (unit: mm)



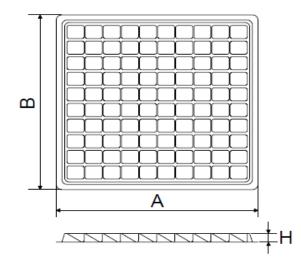


REFLOW PROFILE

		T	
Reflow Condition		Pb-Free assembly	
		(see figure at right)	
Pre Heat	-Temperature Min (T _{s(min)})	+150℃	
	-Temperature Max(T _{s(max)})	+200℃	
	-Time (Min to Max) (ts)	60-180 secs.	
Average ramp up rate (Liquidus Temp (T _L)to peak)		3℃/sec. Max	
T _{s(max)} to T _L - Ramp-up Rate		3℃/sec. Max	
Reflow	-Temperature(T∟)(Liquidus)	+217 ℃	
	-Temperature(t∟)	60-150 secs.	
Peak Temp (T _p)		+260(+0/-5)°C	
Time within 5°Cof actual Peak Temp (t _p)		~10 secs.	
Ramp-down Rate		6℃/sec. Max	
Time 25℃ to Peak Temp (T _P)		8 min. Max	
Do not exceed		+260℃	
Do not exceed		+260 C	



PACKAGE BOX INFORMATION



Symbol	Dimension(mm)			
Symbol	Spec.	Tolerance		
А	217.0	±1.0		
В	207.0	±1.0		
Н	10.3	±0.2		



PACKAGING

Part No.	Box Quantity (pcs)	Per Carton (pcs)	
J20GxxxM3LK	100	10000	

JieJie products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable JieJie product documentation. Warranties granted by JieJie shall be deemed void for products used for any purpose not expressly set forth in applicable JieJie documentation. JieJie shall not be liable for any claims or damages arising out of products used in applications not expressly intended by JieJie as set forth in applicable JieJie documentation. The sale and use of JieJie products is subject to JieJie terms and conditions of sale, unless otherwise agreed by JieJie. 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 is the 1.3rd version which is made in 2-Sep.-2024. This document supersedes and replaces all information previously supplied.

is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd. Copyright ©2024 Jiangsu JieJie Microelectronics Co., Ltd. Printed All rights reserved.