



## J20GxxxM2LC Gas Discharge Tube

Rev.1.1

### FEATURE

- ✧ Eliminates small size design EIA 8.0×6.0mm.
- ✧ Current handling capability 20,000A@8/20μs.
- ✧ Low capacitance and insertion loss.
- ✧ Fast response and long service life.
- ✧ Reliable to protect electrostatic surge.
- ✧ Moisture sensitivity level: Level 1.



Exterior



Schematic symbol

### APPLICATION INFORMATION

- ✧ Repeaters, modems.
- ✧ Telephone interface, line cards.
- ✧ Data communication equipment.
- ✧ Line test equipment.

### ELECTRICAL CHARACTERISTICS

Part number	DC breakdown voltage 100V/s(V)	Tolerance of $V_s$	Impulse spark-over voltage 1KV/μs(V)	Impulse discharge current 8/20μs(A)	Insulation resistance		$C_o$ (1MHz)
					GΩ	DC(V)	
J20G091M2LC	90	±20%	≤700	20,000	≥1	100	≤1.5pF
J20G231M2LC	230	±20%	≤800	20,000	≥1	100	≤1.5pF
J20G471M2LC	470	±20%	≤1100	20,000	≥1	100	≤1.5pF
J20G601M2LC	600	±20%	≤1300	20,000	≥1	100	≤1.5pF

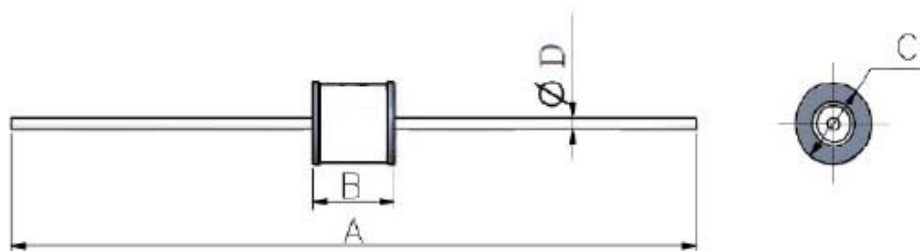
1. The parameters of all tested by ITU-T K12.
2. Total Impulse discharge current 20,000A @ 8/20μs by IEC 61000-4-5, 10 shots.
3. The capacitance is tested by 1MHz@DC=0.5V.
4. The V-T waveform of DCBV and IPBV mus lie between the shades.

**PART NUMBERING SYSTEM**

J20G 471 M 2L C  
 (1) (2) (3) (4) (5)

- (1) JieJie 20kA gas discharge tube
- (2) DC breakdown voltage, e.g., 471=47×10<sup>1</sup>=470V
- (3) Tolerance is DC breakdown voltage, M=+-20%, N=+-30%
- (4) 2-electrod DIP
- (5) Dimension in 8.0×6.0 (mm)

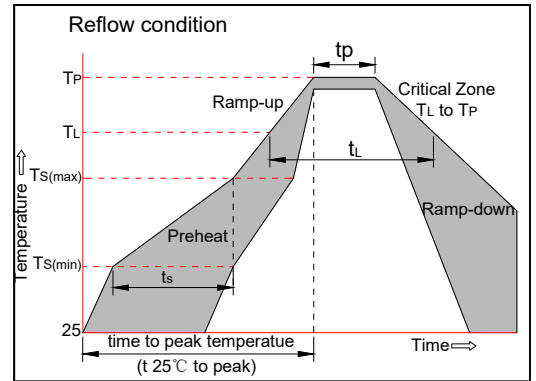
**PRODUCT DIMENSIONS (unit: mm)**



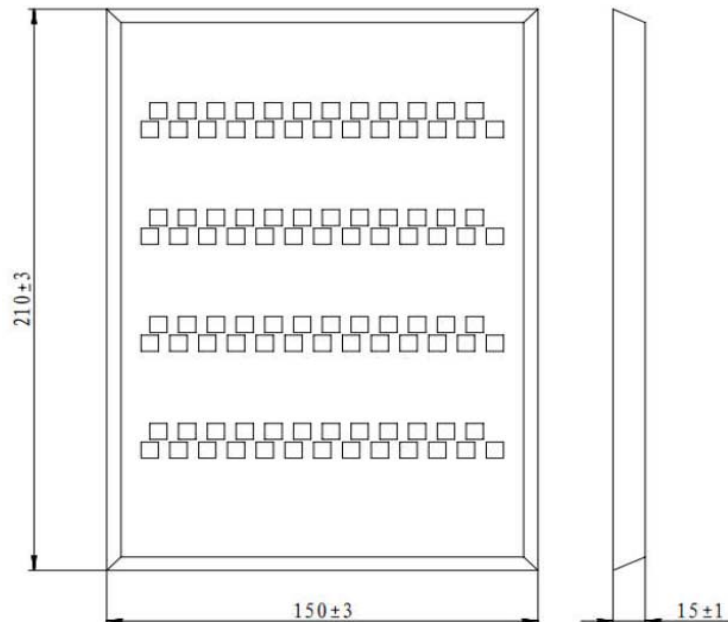
REF	mm	inch
A	62±2	2.441±0.079
B	6±0.2	0.236±0.008
C	Φ8±0.2	Φ0.315±0.008
D	Φ1.0±0.06	Φ0.0394±0.0024

REFLOW PROFILE

Reflow Condition		Pb-Free assembly (see figure at right)
Pre Heat	-Temperature Min ( $T_{s(min)}$ )	+150°C
	-Temperature Max( $T_{s(max)}$ )	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquidus Temp ( $T_L$ )to peak)		3°C/sec. Max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature( $T_L$ )(Liquidus)	+217°C
	-Temperature( $t_L$ )	60-150 secs.
Peak Temp ( $T_p$ )		+260(+0/-5)°C
Time within 5°C of actual Peak Temp ( $t_p$ )		~10 secs.
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp ( $T_p$ )		8 min. Max
Do not exceed		+260°C



PACKAGE BOX INFORMATION



100pcs/box

**PACKAGING**


Part No.	Box Quantity (pcs)	Per Carton (pcs)
J20GxxxM2LC	100	10,000

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