# J20GxxxM3LK Gas Discharge Tube

## **FEATURE**

- Eliminates small size design EIA  $10.0 \times 8.0$  mm. ∻
- ♦ Current handling capability 20KA @ 8/20µs.
- ♦ Low capacitance and insertion loss.
- ♦ Fast response and long service life.
- ♦ Reliable to protect electrostatic surge.
- ♦ Moisture sensitivity level: Level 1.

# **APPLICATION INFORMATION**

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

# **ELECTRICAL CHARACTERISTICS**

Part number	DC breakdown		Impulse spark-over	Impulse discharge current 8/20µs(kA)	Insulation resistance		Co
	voltage 100V/s(V)	of V <sub>S</sub>	voltage 1KV/µs(V)		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.



Rev.1.1

Exterior



Schematic symbol

#### PART NUMBERING SYSTEM

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

(1)JieJie 20KA gas discharge tube

- (2) DC breakdown voltage, e.g.,  $091=90 \times 10^{1}=90V$
- (3) Tolerance is DC breakdown voltage, M=+-20%, N=+-30%
- (4) 3-electrod DIP
- (5) Dimension in 10.0×7.2×7.2 (mm)

# **PRODUCT DIMENSIONS (unit: mm)**



## **REFLOW PROFILE**

Reflow Condition		Pb-Free assembly	
		(see figure at right)	
Pre Heat	-Temperature Min (T <sub>s(min)</sub> )	+150℃	
	-Temperature Max(T <sub>s(max)</sub> )	<b>+200</b> ℃	
	-Time (Min to Max) (ts)	60-180 secs.	Reflow condition
Average ramp up rate (Liquidus Temp (T <sub>L</sub> )to peak)		3℃/sec. Max	TP Ramp-up TLCritical Zone TL to TP
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3℃/sec. Max	
Reflow	-Temperature(T <sub>L</sub> )(Liquidus)	<b>+217</b> ℃	Preheat
Rellow	-Temperature( $t_L$ )	60-150 secs.	TS(min) - ts
Peak Temp (T <sub>p</sub> )		<b>+260(+0/-5)</b> ℃	25 time to peak temperatue (t 25 °C to peak) Time⇒
Time within 5 $^\circ C$ of actual Peak Temp (t <sub>p</sub> )		~10 secs.	(125 C to peak)
Ramp-down Rate		6℃/sec. Max	
Time 25 $^\circ \!$		8 min. Max	
Do not exceed		<b>+260</b> ℃	

### PACKAGE BOX INFORMATION



Curren el	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

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