

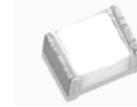


## J2GxxxN2SA Gas Discharge Tube

Rev.1.0

### FEATURE

- ✧ Eliminates small size design EIA 4.5×3.2×2.7mm.
- ✧ Current handling capability 2,000A@8/20μs.
- ✧ Low capacitance and insertion loss.
- ✧ Fast response and long service life.
- ✧ Reliable to protect electrostatic surge.
- ✧ Moisture sensitivity level: Level 1.
- ✧ Storage and operating temperature -40~125°C.



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)	
J2G091N2SA	90	±30%	≤700	2000	≥1	50	≤1pF
J2G151N2SA	150	±30%	≤750	2000	≥1	50	≤1pF
J2G231N2SA	230	±30%	≤800	2000	≥1	100	≤1pF
J2G301N2SA	300	±30%	≤900	2000	≥1	100	≤1pF
J2G401N2SA	400	±30%	≤1000	2000	≥1	100	≤1pF
J2G471N2SA	470	±30%	≤1050	2000	≥1	100	≤1pF

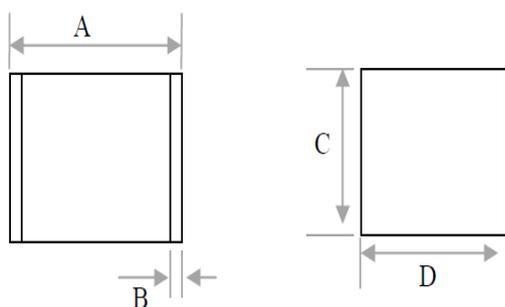
1. The parameters of all tested by ITU-T K12.
2. Total Impulse discharge current 2,000A@ 8/20μs by IEC 61000-4-5, 10 shots.
3. The capacitance is tested by 1MHz@DC=0.5V.
4. The V-T waveform of DCBV and IPBV mus lie between the shades.

**PART NUMBERING SYSTEM**

J2G 091 N 2S A  
 (1) (2) (3) (4) (5)

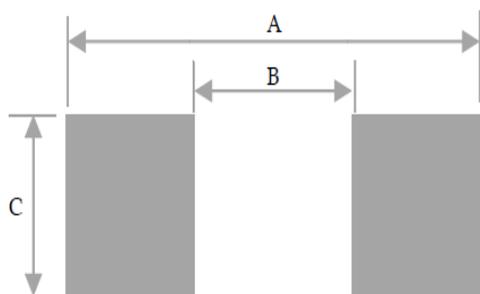
- (1) JieJie 2KA gas discharge tube
- (2) DC breakdown voltage, e.g., 91=9×10<sup>1</sup>=90V
- (3) Tolerance is DC breakdown voltage, M=+-20%, N=+-30%
- (4) 2-electrod SMD
- (5) Dimension in 4.5×3.2×2.7 (mm)

**PRODUCT DIMENSIONS (unit: mm)**



REF	mm	inch
A	4.5±0.3	0.177±0.012
B	0.5±0.2	0.020±0.008
C	2.7±0.2	0.106±0.008
D	3.2±0.2	0.126±0.008

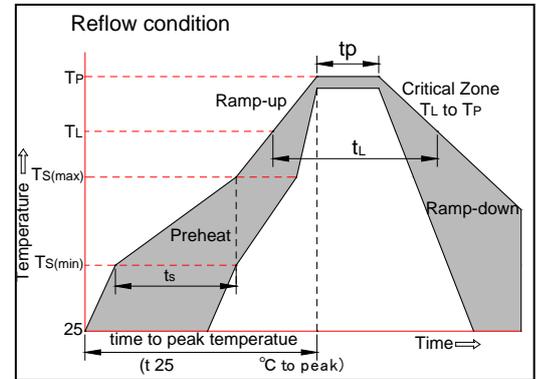
**RECOMMENDED SOLDERING PAD**



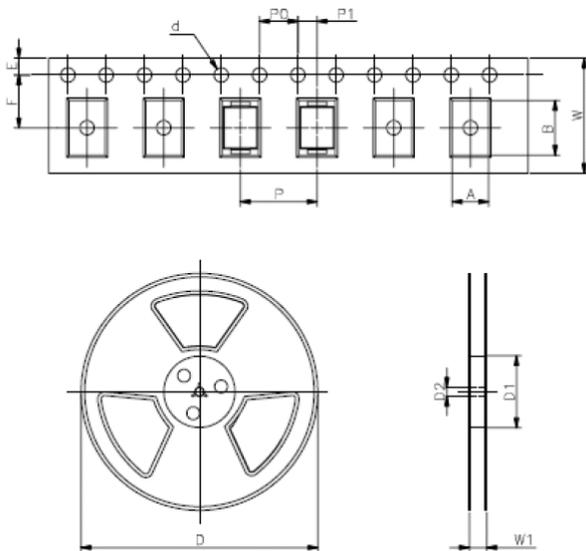
REF	mm	inch
A	5.5	0.217
B	3.5	0.138
C	3.5	0.138

**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 REEL INFORMATION**



REF	mm	inch
A	3.7±0.2	0.146±0.008
B	4.7±0.2	0.185±0.008
d	Φ1.5±0.1	Φ0.059±0.004
E	1.75±0.1	0.069±0.004
F	5.5±0.1	0.217±0.002
P	8.0±0.1	0.315±0.004
P0	4.0±0.1	0.157±0.004
P1	2.0±0.1	0.079±0.004
W	12.0±0.2	0.472±0.008
D	Φ330.0	Φ13.0
D1	Φ50Min	Φ1.97Min
D2	Φ13±0.15	0.512±0.006
W1	16.8±2.0	0.661±0.079

**PACKAGING**

Part No.	Reel Quantity (pcs)	Per Carton (pcs)
J2GxxxN2SA	2500	50,000

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