



J5GxxxM2SG Gas Discharge Tube

Rev.1.2

FEATURE

Eliminates small size design EIA 4.2×5.0×5.0mm.

Current handling capability 5,000A@8/20μs.

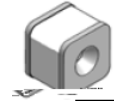
Low capacitance and insertion loss.

Fast response and long service life.

Reliable to protect electrostatic surge.

Moisture sensitivity level: Level 1.

Storage and operating temperature -40~85 .



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 Vs	Impulse spark-over voltage 1KV/μs(V)	Impulse discharge current 8/20μs(A)	Insulation resistance		Co (1MHz)
					G	DC(V)	
J5G091M2SG	90	±20%	650	5000	1	50	1pF
J5G151M2SG	150	±20%	680	5000	1	50	1pF
J5G231M2SG	230	±20%	700	5000	1	100	1pF
J5G351M2SG	350	±20%	750	5000	1	100	1pF
J5G421M2SG	420	±20%	850	5000	1	100	1pF
J5G601M2SG	600	±20%	1200	5000	1	100	1pF

1. The parameters of all tested by ITU-T K12.

2. Total Impulse discharge current 5,000A@8/20μs by IEC 61000-4-5, 10 shots.

3. The capacitance is tested by 1MHz@DC=0.5V.

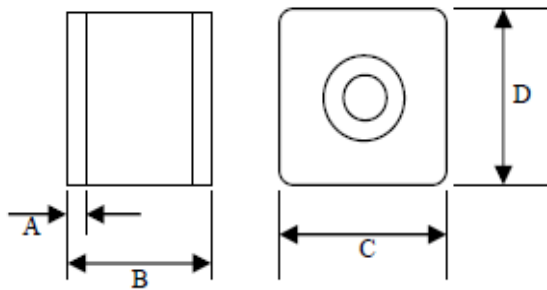
4. The V-T waveform of DCBV and IPBV mus lie between the shades.

PART NUMBERING SYSTEM

J5G 421 M 2S G
 (1) (2) (3) (4) (5)

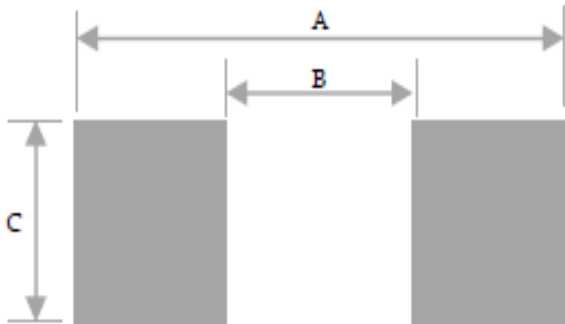
- (1) JieJie 5KA gas discharge tube
- (2) DC breakdown voltage, e.g., 421=42×10¹=420V
- (3) Tolerance is DC breakdown voltage, M=+-20%, N=+-30%
- (4) 2-electrod SMD
- (5) Dimension in 4.2×5.0×5.0 (mm)

PRODUCT DIMENSIONS (unit: mm)



REF	mm	inch
A	0.5±0.1	0.020±0.004
B	4.2±0.3	0.165±0.012
C	5.0±0.2	0.197±0.008
D	5.0±0.2	0.197±0.008

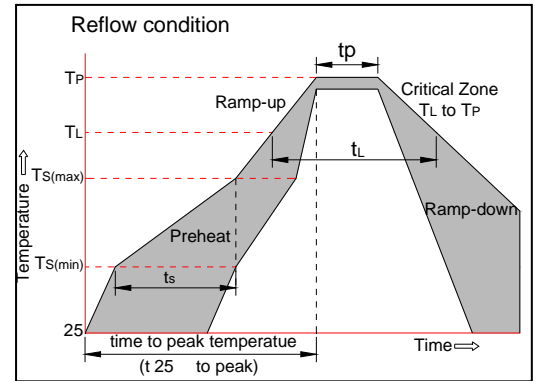
RECOMMENDED SOLDERING PAD



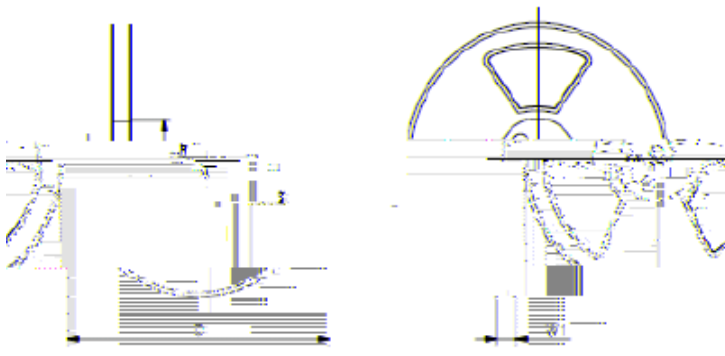
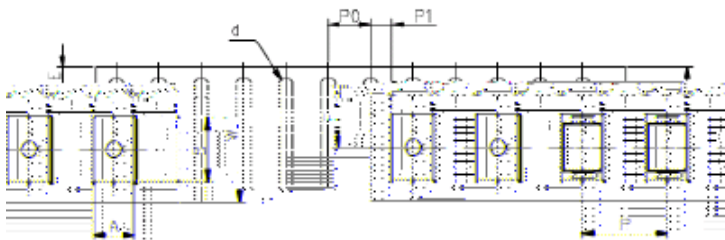
REF	mm	inch
A	4.95	0.195
B	3.0	0.118
C	0.21±0.005	0.008±0.0002

REFLOW PROFILE

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_L)(Liquidus)	+217
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)
Time within 5 of 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



PACKAGE REEL INFORMATION



REF	mm	inch
A	5.3±0.1	0.209±0.004
B	4.5±0.2	0.177±0.008
d	Φ 1.5±0.1	Φ 0.059±0.004
P0	4.0±0.1	0.157±0.004
P1	3.0±0.1	0.079±0.004
P2	2.0±0.1	0.079±0.004
P3	1.75±0.1	0.069±0.004
F	7.5±0.1	0.295±0.004
W	16.0±0.3	0.630±0.012
D	Φ 330.0	Φ 13.0
Ø	Φ 13±0.15	0.512±0.006
W1	16.8±2.0	0.661±0.079

PACKAGING

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 sal