



FEATURE

- ✧ Eliminates small size design EIA $3.2 \times 1.6 \times 1.6\text{mm}$.
- ✧ Current handling capability $500\text{A}@8/20\mu\text{s}$.
- ✧ 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 $-40\sim 125^{\circ}\text{C}$.



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 8/20 μs (A)	Insulation resistance		C_o (1MHz)
					G Ω	DC(V)	
J05G091N2SE	90	$\pm 30\%$	≤ 650	500	≥ 1	50	$\leq 1\text{pF}$
J05G151N2SE	150	$\pm 30\%$	≤ 750	500	≥ 1	50	$\leq 1\text{pF}$
J05G231N2SE	230	$\pm 30\%$	≤ 950	500	≥ 1	50	$\leq 1\text{pF}$
J05G401N2SE	400	$\pm 30\%$	≤ 1100	500	≥ 1	100	$\leq 1\text{pF}$

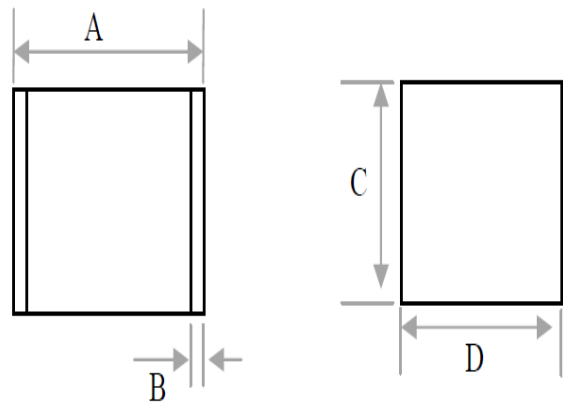
1. The parameters of all tested by ITU-T K12.
2. Total Impulse discharge current $500\text{A}@8/20\mu\text{s}$ by IEC 61000-4-5, 10 shots.
3. The capacitance is tested by $1\text{MHz}@DC=0.5\text{V}$.
4. The V-T waveform of DCBV and IPBV mus lie between the shades.

PART NUMBERING SYSTEM

J05G 091 N 2S E
(1) (2) (3) (4) (5)

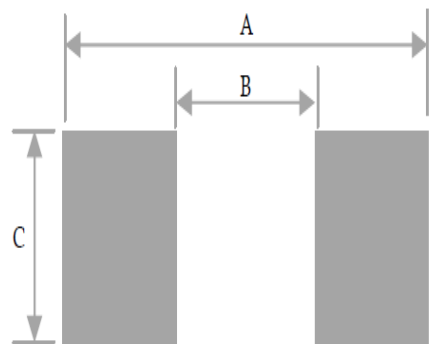
- (1)JieJie 500A gas discharge tube
- (2) DC breakdown voltage, e.g., 091=9×10¹=90V
- (3) Tolerance is DC breakdown voltage, M=+-20%, N=+-30%
- (4) 2-electrod SMD
- (5) Dimension in 3.2×1.6×1.6 (mm)

PRODUCT DIMENSIONS (unit: mm)



REF	mm	inch
A	3.2±0.3	0.126±0.013
B	0.3±0.2	0.013±0.008
C	1.6±0.2	0.063±0.008
D	1.6±0.2	0.063±0.008

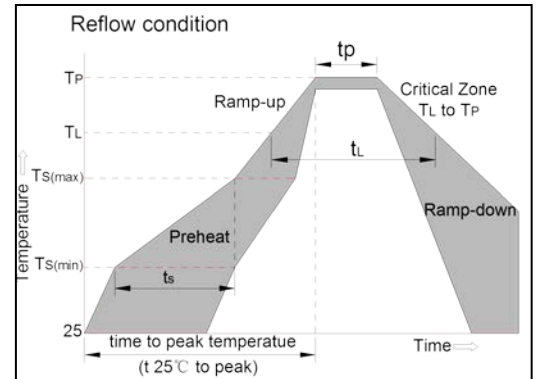
RECOMMENDED SOLDERING PAD



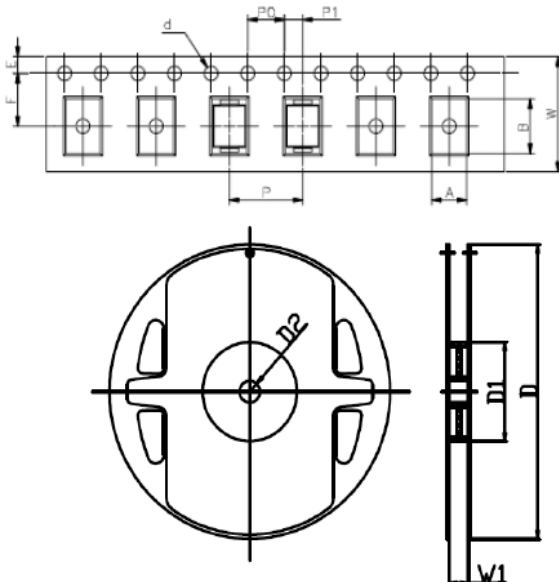
REF	mm	inch
A	4.5	0.177
B	2.0	0.079
C	1.8	0.070

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	1.9±0.2	0.074±0.008
B	3.6±0.2	0.141±0.008
d	Φ1.5±0.2	Φ0.059±0.008
P0	4.0±0.2	0.157±0.008
P1	2.0±0.2	0.079±0.008
P	4.0±0.2	0.156±0.008
E	1.75±0.2	0.069±0.008
F	5.5±0.2	0.217±0.008
W	12.0±0.2	0.472±0.008
D	Φ178±2	Φ7.008±0.079
D1	Φ50Min	Φ1.97Min
D2	Φ13±2	0.512±0.079
W1	12.6±2	0.496±0.079

PACKAGING

Part No.	Reel Quantity (pcs)	Per Carton (pcs)
J05GxxxN2SE	3000	30000

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