



FEATURE

- ✧ Eliminates small size design EIA 8.3×8.3×6.0mm.
- ✧ 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)	
J20G091M2SH	90	±20%	≤700	20,000	≥1	100	≤1.5pF
J20G231M2SH	150	±20%	≤900	20,000	≥1	100	≤1.5pF
J20G471M2SH	470	±20%	≤1100	20,000	≥1	100	≤1.5pF
J20G601M2SH	600	±20%	≤1300	20,000	≥1	100	≤1.5pF

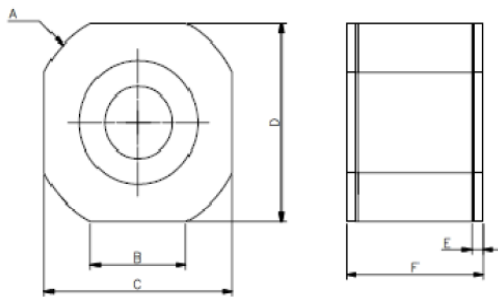
1. The parameters of all tested by ITU-T K12.
2. Total Impulse discharge current 20,000A@ 8/20μs by IEC 61000-4-5, 10 shots.
3. The capacitance is tested by 1MHz@DC=0.5V.
4. The V-T waveform of DCBV and IPBV mus lie between the shades.

PART NUMBERING SYSTEM

J20G 231 M 2S H
 (1) (2) (3) (4) (5)

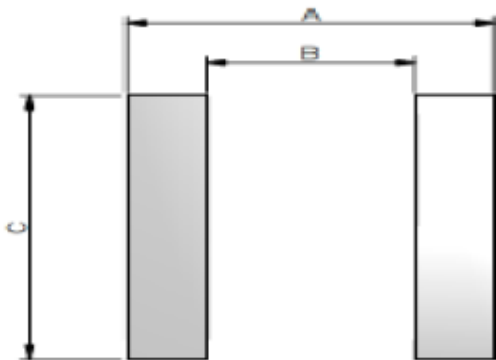
- (1) JieJie 20KA gas discharge tube
- (2) DC breakdown voltage, e.g., 231 = $23 \times 10^1 = 230V$
- (3) Tolerance is DC breakdown voltage, M = $\pm 20\%$, N = $\pm 30\%$
- (4) 2-electrod SMD
- (5) Dimension in $8.3 \times 8.3 \times 6.0$ (mm)

PRODUCT DIMENSIONS (unit: mm)



REF	mm	inch
A	$\Phi 9.3 \pm 0.1$	$\Phi 0.366 \pm 0.004$
B	4.2 ± 0.1	0.165 ± 0.004
C	8.3 ± 0.2	0.327 ± 0.008
D	8.3 ± 0.2	0.327 ± 0.008
E	0.5 ± 0.05	0.02 ± 0.002
F	6 ± 0.2	0.236 ± 0.008

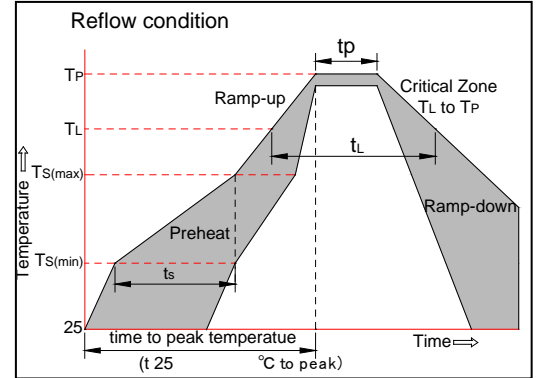
RECOMMENDED SOLDERING PAD



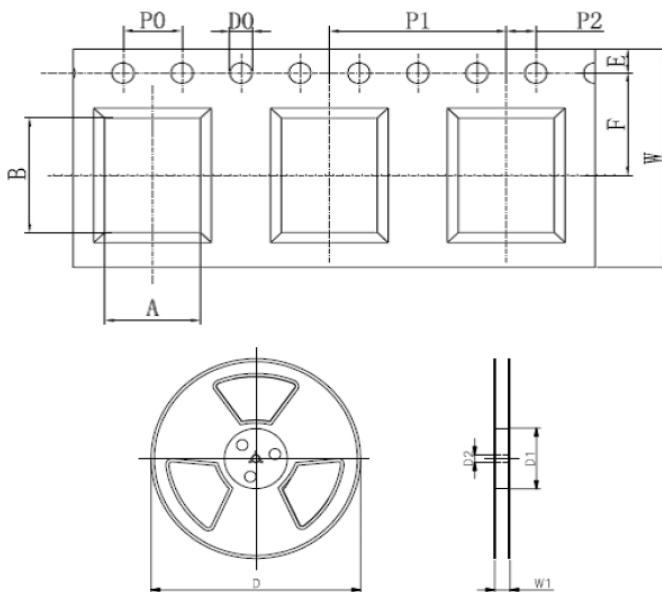
REF	mm	inch
A	7.95	0.313
B	4.5	0.177
C	8	0.315

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
P0	4.0±0.1	0.157±0.004
D0	Φ1.5 ^{+0.1} ₋₀	Φ0.059 ^{+0.004} ₋₀
P1	12±0.1	0.472±0.004
P2	2.0±0.1	0.079±0.004
A	6.5±0.2	0.256±0.008
B	8.4±0.2	0.331±0.008
F	7.5±0.1	0.295±0.004
E	1.75±0.1	0.069±0.004
W	16±0.3	0.63±0.012
D	Φ330±2	Φ12.99±0.079
D1	Φ100±2	Φ3.94±0.079
D2	Φ13±0.15	0.512±0.006
W1	21±2	0.827±0.079

PACKAGING


Part No.	Reel Quantity (pcs)	Per Carton (pcs)
J20GxxxM2SH	500	10,000

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