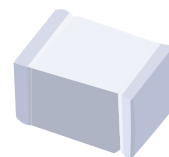
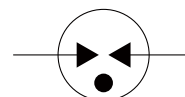


FEATURES

- | Surface Mounting Design 3.2*1.6*1.6mm
- | High Current Handling Capability 500A @ 8/20 μ s
- | Low Capacitance and Insertion Loss
- | Quick Response and Long Service Life
- | Moisture sensitivity level: Level 1



3.2*1.6*1.6mm



Schematic Symbol

APPLICATION INFORMATION

- | Communication equipment.
- | Repeaters, Modems
- | Telephone Interface, Line cards.
- | Data communication equipment.

AGENCY APPROVALS

Icon	Solderability
RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003
	Mean lead free
	UL Certificated E505857

PRODUCT CHARACTERISTICS

Lead Material	Body Material	Terminal Finish
Copper or Fe-Ni alloy	Ceramics	100% Matte-Tin Plated

ELECTRICAL PARAMETER

Parameter	Condition	Rating	Unit
DC Blocking Voltage 1)	100V/s	210-390	V
Impulse Spark-over Voltage	At 1kV/ μ s	for 99 % of measured values $\leq$ 950	V
	At 1kV/ μ s	Typical values of distribution $\leq$ 900	V
Impulse Discharge Current 2)	8/20 μ s	500	A
Insulation Resistance	DC=100V	$\geq$ 1	G Ω
Capacitance at 1MHz	V _{DC} =0.5V	$\leq$ 0.6	pF
Operating And Storage Temperature		-40-125	°C

1) In ionized mode

2) Terms and waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21

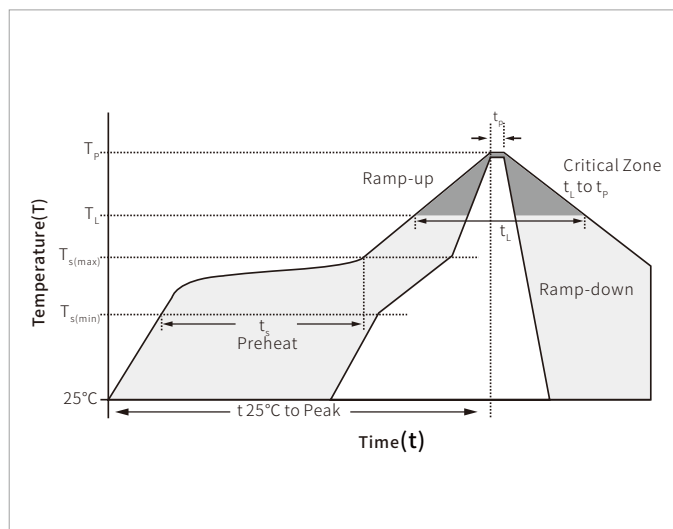
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

Testing items	Technical standards
High Temperature Storage Test	Temperature: 85°C ; Time:2H
Low Temperature Storage Test	Temperature: -40°C ; Time:2H
Vibration	Frequency: 10-500Hz ; Amplitude:0.15mm ; Time:45min
Resistance of soldering heat	Temperature:260°C;Time of dip soldering :10s,1time

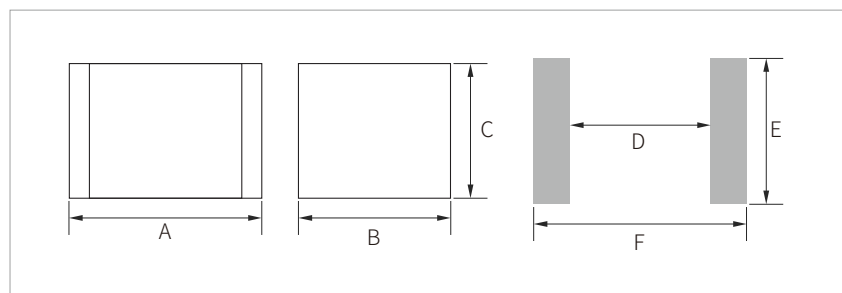
NOTE:Up-screen program can be specified by customer' s request via contacting Semiware service

REFLOW PROFILE

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min	150°C
	Temperature Max	200°C
	Time(min to max)	60 – 180 secs
Average ramp up rate (Liquidus)Temp (T _L) to peak		3°C/second max
T _s (max)to T _L - Ramp-up Rate		
Reflow	Temperature (T _L) (Liquidus)	217°C
	Time (min to max) (t _L)	60 – 150 seconds
Peak Temperature (T _p)		260°C
Time within 5°C of actual peak Temperature (tp)		10 – 30 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T _p)		8 minutes max.
Do not exceed		260°C

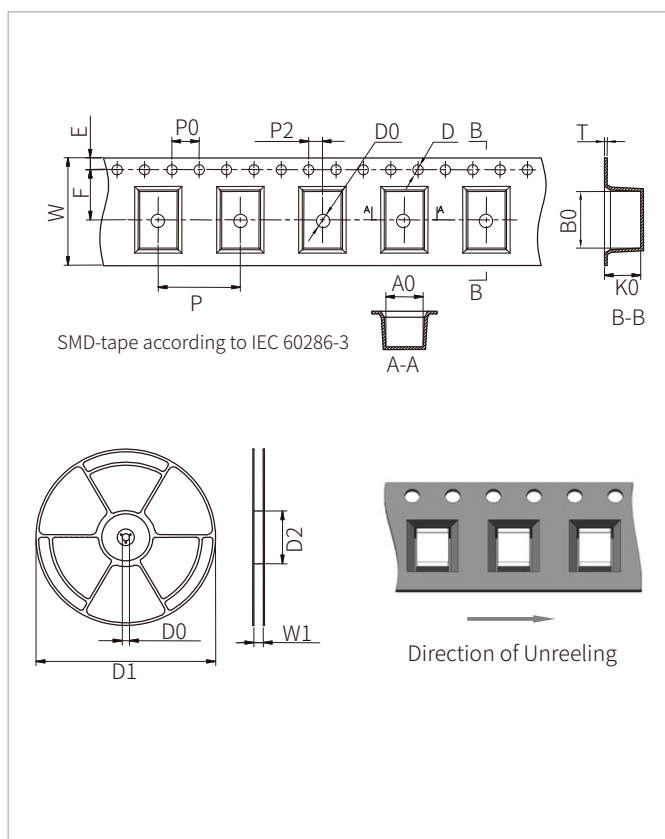


PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm
A	$3.2 \pm 0.3\text{mm}$
B	$1.6 \pm 0.3\text{mm}$
C	$1.6 \pm 0.3\text{mm}$
D	2.0mm
E	1.8mm
F	4.0mm

TAPE AND REEL SPECIFICATION



Ref.	Dimensions	
	Millimeters	Inches
W	12 ± 0.3	0.472 ± 0.012
A0	2.8 ± 0.1	0.110 ± 0.004
B0	3.5 ± 0.1	0.138 ± 0.004
K0	2.8 ± 0.1	0.110 ± 0.004
P	8.0 ± 0.1	0.315 ± 0.004
F	5.5 ± 0.1	0.217 ± 0.004
E	1.75 ± 0.1	0.069 ± 0.004
D	$1.5 + 0.1 / - 0.0$	$0.059 + 0.004 / - 0.0$
P0	4 ± 0.1	0.157 ± 0.004
P2	2 ± 0.1	0.079 ± 0.004
T	0.35 ± 0.05	0.014 ± 0.002
D0	13.3 ± 0.15	0.524 ± 0.006
D1	330 ± 2	12.992 ± 0.079
D2	$100 + 1 / - 2$	$3.937 + 0.039 / - 0.079$
W1	12.5 ± 0.4	0.492 ± 0.016

ORDERING INFORMATION

Part Number	Size	QTY/Reel	Reel Size
BS301N	3.2*1.6*1.6mm	3000PCS	13"

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