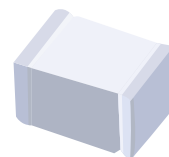
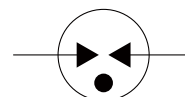


## FEATURES

- | Surface Mounting Design 3.2\*1.6\*1.6mm
- | High Current Handling Capability 500A @ 8/20 μs
- | 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/ $\mu$ s	for 99 % of measured values $\leq$ 950	V
	At 1kV/ $\mu$ s	Typical values of distribution $\leq$ 900	V
Impulse Discharge Current 2)	8/20 $\mu$ s	500	A
Insulation Resistance	DC=100V	$\geq$ 1	G $\Omega$
Capacitance at 1MHz	V <sub>DC</sub> =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

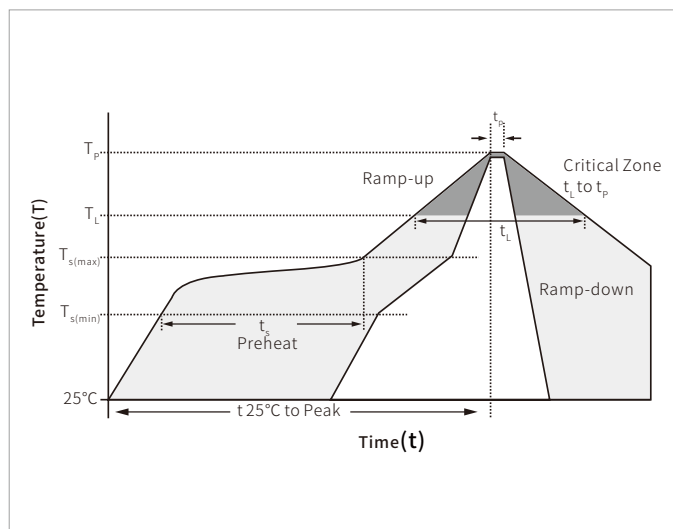
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

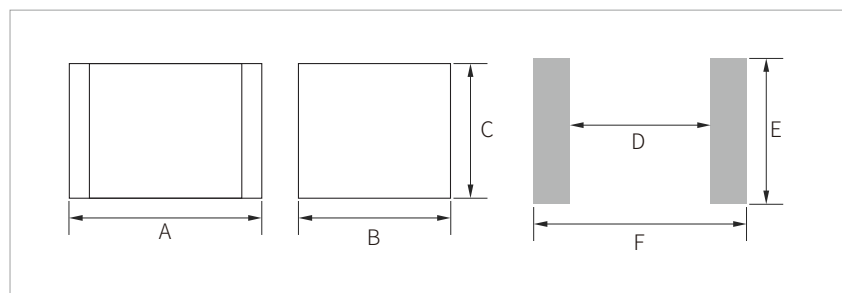
**NOTE:**Up-screen program can be specified by customer' s request via contacting Semiware service

## 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 <sub>L</sub> ) to peak		3°C/second max
T <sub>s</sub> (max)to T <sub>L</sub> - Ramp-up Rate		
Reflow	Temperature (T <sub>L</sub> ) (Liquidus)	217°C
	Time (min to max) (t <sub>L</sub> )	60 – 150 seconds
Peak Temperature (T <sub>p</sub> )		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 <sub>p</sub> )		8 minutes max.
Do not exceed		260°C

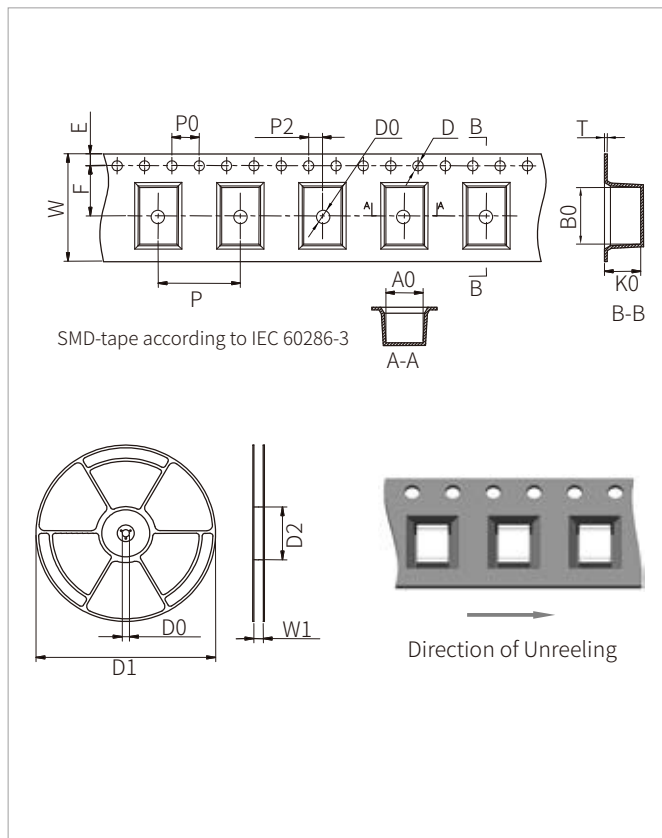


## PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm
A	3.2±0.3mm
B	1.6±0.3mm
C	1.6±0.3mm
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-SW	3.2*1.6*1.6mm	3000PCS	13"

To find your local partner within Semiwell' s website : [www.semiwell.com](http://www.semiwell.com)  
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