

FEATURES

Surface Mounting Design 3.2*1.6*1.6mm

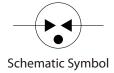
High Current Handling Capability 500A @ 8/20 μs

Low Capacitance and Insertion Loss

Quick Response and Long Service Life

Moisture sensitivity level: Level 1





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		
₽6	Mean lead free		
R .	UL Certificated E505857		

PRODUCT CHARACTERISTICS

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

Product Datasheet 1/5 Http://semiwell.com.cn



ELECTRICAL PARAMETER

Parameter	Condition	Rating	Unit
DC Blocking Voltage 1)	100V/s	210-390	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤ 950	V
impuise Spark-over voltage	At 1kV/μs	Typical values of distribution ≤ 900	V
Impulse Discharge Current 2)	Current 2) 8/20μs 500		А
Insulation Resistance	DC=100V	≥ 1	GΩ
Capacitance at 1MHz	ance at 1MHz $V_{DC}=0.5V$ ≤ 0.6		рF
Operating And Storage Temperature		-40-125	°C

¹⁾ In ionized mode

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	

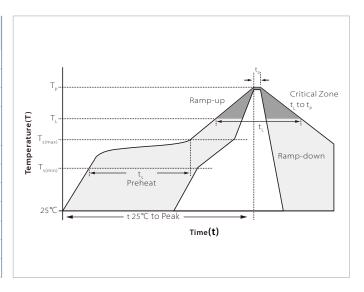
NOTE: Up-screen program can be specified by customer's request via contacting Semiware service

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

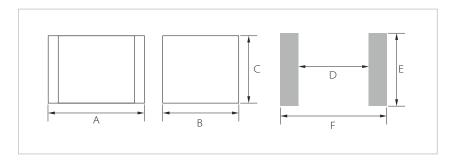


REFLOW PROFILE

Reflow Condition		Lead-free assembly	
	Temperature Min	150°C	
Pre Heat	Temperature Max	200°C	
	Time(min to max)	60 – 180 secs	
Average ra	amp up rate (Liquidus)Temp (T _L) to peak	3°C/second max	
	T₅(max)to Tॄ - Ramp-up Rate	5 6, 5000114 1114	
Reflow	Temperature (T _L) (Liquidus)	217°C	
Kellow	Time (min to max) (t_L)	60 – 150 seconds	
PeakTem	perature (T♭)	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,)		8 minutes max.	
Do not exceed		260°C	



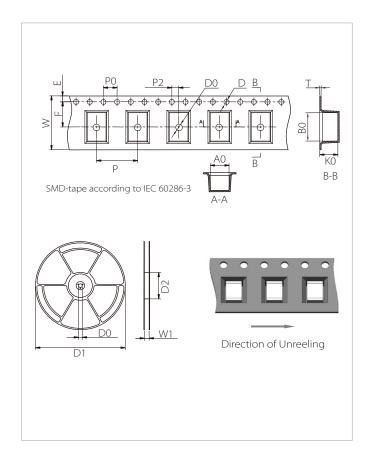
PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm	
А	3.2±0.3mm	
В	1.6±0.3mm	
С	1.6±0.3mm	
D	2.0mm	
Е	1.8mm	
F	4.0mm	



TAPE AND REEL SPECIFICATION



Ref.	Dimensions		
Rei.	Millimeters	Inches	
W	12±0.3	0.472±0.012	
A0	2.8±0.1	0.110±0.004	
ВО	3.5±0.1	0.138±0.004	
KO	2.8±0.1	0.110±0.004	
Р	8.0±0.1	0.315±0.004	
F	5.5±0.1	0.217±0.004	
Е	1.75±0.1	0.069±0.004	
D	1.5+0.1/-0.0	0.059+0.004/-0.0	
PO	4±0.1	0.157±0.004	
P2	2±0.1	0.079±0.004	
Т	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"







To find your local partner within Semiwell's website: www.semiwell.com.cn © 2023 Semiwell Microelectronics Co.,Ltd.

The content of this document has been carefully checked and understood. However, neither Semiwell nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and theconsequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiwell does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiwell. Latest publications and a complete disclaimer can be downloaded from the Semiwell website. All trademarks recognized.