

### **FEATURES**

| Size Design 5.0\*5.0\*7.5mm

High Current Handling Capability 5000A @ 8/20 μs

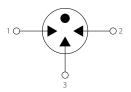
Low Capacitance and Insertion Loss

| Quick Response and Long Service Life

| Moisture sensitivity level: Level 1



5.0\*5.0\*7.5mm



Schematic Symbol

## **APPLICATION INFORMATION**

Communication equipment.

Repeaters, Modems

| Telephone Interface,Line cards.

Data communication equipment.

# **AGENCY APPROVALS**

lcon	Solderability	
RoHS	Compliance with 2011/65/EU	
HF	Compliance with IEC61249-2-21:2003	
<b>®</b>	Mean lead free	
<i>IR</i> 。	UL Certificated E505857	

## **PRODUCT CHARACTERISTICS**

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



# **ELECTRICAL PARAMETER**

Parameter	Symbol	Rating	Unit
DC Blocking Voltage 1)	100V/s	120-180	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤600	V
impuise spark-over voitage	At 1kV/μs	Typical values of distribution ≤500	V
Impulse Discharge Current 2)	8/20µs	5	KA
Insulation Resistance	DC=50V	≥ 1	GΩ
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	≤ 1	рF
Operating and Storage Temperature		-40~90	°C

<sup>1)</sup> 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	of soldering heat Temperature: 260°C; Time of dip soldering: 10s,1time	

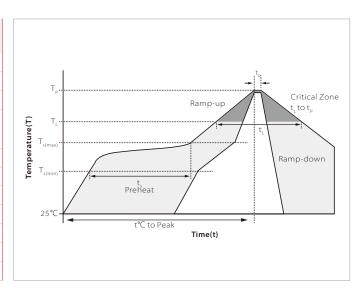
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

<sup>2)</sup> Terms and waveforms in accordance with ITU-T Rec. K. 12; IIEC 61643-311

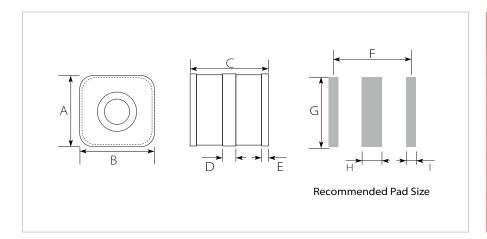


## **REFLOW PROFILE**

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	
	$T_s$ (max)to $T_L$ - Ramp-up Rate		
Reflow	Temperature $(T_L)$ (Liquidus)	217℃	
Kellow	Time(min to max)( $t_s$ )	60~150 seconds	
PeakTem	perature (T,)	260°C	
Time within 5°C of actual peak Temperature (tp)		20~40 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**

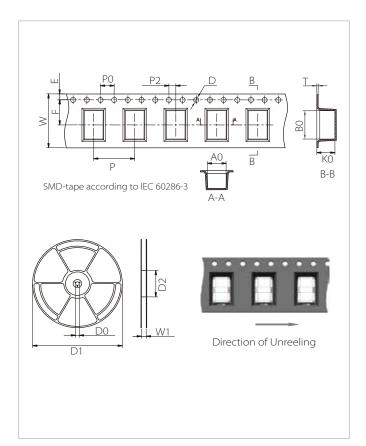


Ref.			
Kei.	Millimeters		
А	5.0±0.2		
В	5.0±0.2		
С	7.5±0.3		
D	1.5±0.3		
Е	0.5±0.2		
F	6.4		
G	5.5		
Н	2.8		
I	1.6		

**Outline Dimensions** 



## **TAPE AND REEL SPECIFICATION**



Ref.	Dimensions		
Ker.	Millimeters	Inches	
W	16±0.3	0.630±0.012	
A0	5.4±0.1	0.213±0.004	
BO	8.4±0.1	0.331±0.004	
K0	5.3±0.1	0.209±0.004	
Р	12±0.1	0.472±0.004	
F	7.5±0.1	0.295±0.004	
E	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	0.4±0.1	0.016±0.004	
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	16.5±0.4	0.65±0.016	

# **ORDERING INFORMATION**

Part Number	Size	QTY/Reel	Reel Size
SG3D05B150B	5.0*5.0*7.5mm	1000PCS	13"



### Headquarters

No.3387 Shendu Road Pujiang I&E Park Minhang Shanghai China 201000

#### Hotline

400-021-5756

#### Web

Https://www.semiware.com

#### **Sales Center**

Tel: 86-21-3463-7458 Email: sales18@semiware.com

#### **Customer Service**

Tel: 86-21-5484-1001 Email: sales17@semiware.com

#### **Technical Support**

Tel: 86-21-3463-7654 Email: fae01@semiware.com

### **Complaint & Suggestions**

Tel: 86-21-3463-7172 Ext: 8868 Email: cs03@semiware.com

#### By QR Code





Wehsite

\A/achat

To find your local partner within Semiware's global network: www.semiware.com

2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware 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. Semiware 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 Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.