

## **FEATURES**

| Surface Mounting Design 5.0\*5.0\*4.2mm | High Current Handling Capability 5000A @ 8/20 μs | Low Capacitance and Insertion Loss

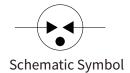
Quick Response and Long Service Life

| Moisture sensitivity level:Level 1

Data communication equipment.



5.0\*5.0\*4.2mm



## **APPLICATION INFORMATION**

l Communication equipment.	
Repeaters, Modems	
Telephone Interface.Line cards.	

## **AGENCY APPROVALS**

Icon	Solderability	
RoHS	Compliance with 2011/65/EU	
HF	Compliance with IEC61249-2-21:2003	
Pb	Mean lead free	
<i>IR</i> 。	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	336-504	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤ 1050	V
impuise Spark-over voltage	At 1kV/μs	Typical values of distribution ≤ 950	V
Impulse Discharge Current 2)	8/20µs	5000	А
AC Discharge Current	50Hz, 1S, 10times	5	А
Insulation Resistance	DC=100V	≥1	GΩ
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	≤ 0.8	
Operating and Storage Temperature		-40-125	°C

<sup>1)</sup> In ionized mode

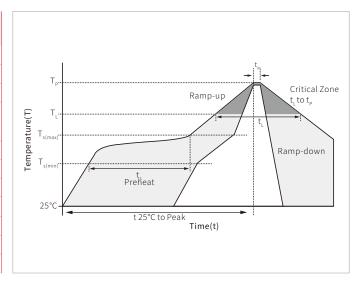
## **ENVIRONMENTAL RELIABILITY CHARACTERISTICS**

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	Temperature: 260±5°C; Time of dip soldering: 10s, 1time	

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

# **REFLOW PROFILE**

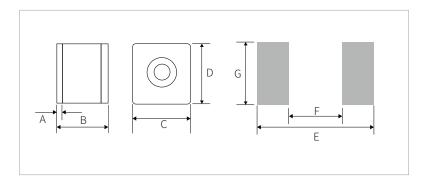
Reflow Condition		Lead-free assembly	
	Temperature Min	150°C	
Pre Heat	Temperature Max	200°C	
	Time(min to max)	60 – 180 secs	
Average ramp up rate (Liquidus) $T_L$ to peak		3°C/second max	
T <sub>s(max)</sub> to T <sub>L</sub> - Ramp-up Rate		5 C/Second max	
Deflam	Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
Reflow	Time(min to max) $(t_s)$	60 – 150 seconds	
Peak Tem	nperature (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 (T₂)		8 minutes max.	
Do not exceed		260°C	



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

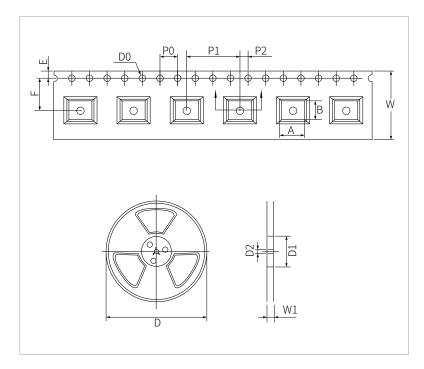


# **DIMENSIONS AND RECOMMENDED SOLDERING PAD**



Ref.	mm	
А	0.5±0.1	
В	4.2±0.3	
С	5.0±0.2	
D	5.0±0.2	
E	4.7	
F	2.5	
G	5.5	

# **PACKAGE REEL INFORMATION**



Ref.	mm	inch
А	5.5±0.1	0.217±0.004
В	4.7±0.2	0.185±0.008
D0	Φ1.5±0.1	Ф 0.059±0.004
P0	4.0±0.1	0.157±0.004
P1	12.0±0.1	0.472±0.004
P2	2.0±0.1	0.079±0.004
E	1.75±0.1	0.069±0.004
F	7.5±0.1	0.295±0.004
W	16.0±0.3	0.630±0.012
D	Ф 330.0	Ф 13.0
D1	Ф 50Min	Ф 1.97Min
D2	Ф 13±0.15	0.512±0.006
W1	16.8±2.0	0.661±0.079

# **ORDERING INFORMATION**

Part Number	Size	QTY/Reel	Reel Size
SG5042B420	5.0*5.0*4.2mm	1000	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





Website

Wechat

To find your local partner within Semiware's global website: 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 the consequences 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.