

### **FEATURES**

Surface Mounting Design 5.4\*5.4\*4.0mm

High Current Handling Capability 5000A @ 8/20 µs

Low Capacitance and Insertion Loss

Quick Response and Long Service Life

Moisture sensitivity level: Level 1



5.4\*5.4\*4.0mm



## **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>1</i> <b>R</b> °	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	
DC Spark-over Voltage 1)	100V/s	72-108	
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤650	V
impuise spair-over voltage	At 1kV/μs	Typical values of distribution ≤600	
Discharge Current (8/20us) 2)	10 times	5	KA
AC Discharge Current	50Hz, 1S	5	А
Minimum Insulation Resistance	Test Voltage DC=50V	1	
Max. Capacitance 1MHz	VDC=0.5V	1	
Operating and Storage Temperature		-40~125	°C

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

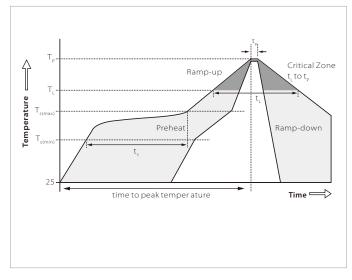
## **ENVIRONMENTAL RELIABILITY CHARACTERISTICS**

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**

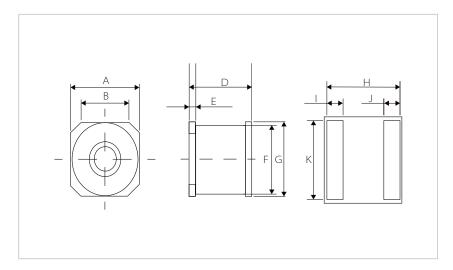
Reflow Condition		Pb-Free assembly	
	Temperature Min	150°C	
Pre Heat	Temperature Max	200°C	
	Time(min to max)	60-180 secs	
Average ramp up rate (Liquidus)Temp ( $T_L$ ) to peak $T_s$ (max)to $T_L$ - Ramp-up Rate		3°C/second max	
D - fl	Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
Reflow	Temperature (T <sub>L</sub> )	60-150 seconds	
Peak Temperature (Tp)		245~260°C	
Time within 5°C of actual peak Temperature (tp)		30 seconds	
Ramp-down Rate		6°C/second max	
Time 25°C to peak Temperature (T,)		8 minutes max.	
Do not ex	kceed	260°C	



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

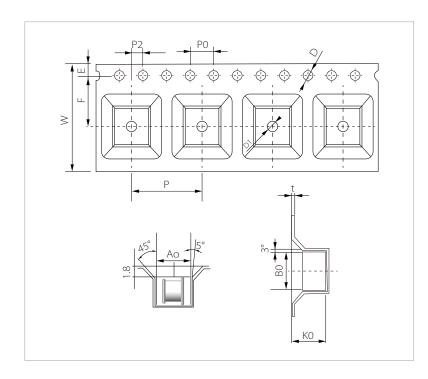


# PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm
А	5.4±0.15
В	3.8
С	Ф6.6±0.2
D	4.0±0.2
Е	0.5±0.1
F	Ф4.7±0.2
G	Ф5.4±0.15
Н	4.7
I	1.3
J	1.3
K	3.9

## **PACKAGE REEL INFORMATION**



Ref.	mm		
W	16.0±0.3		
Р	12.0±0.1		
Е	1.75±0.1		
F	7.5±0.1		
P2	2.0±0.1		
D	1.5±0.1		
D1	1.5±0.1		
PO	4.0±0.1		
10P0	40.0±0.2		
AO	5.7±0.1		
ВО	5.7±0.1		
КО	5.7±0.1		
t	0.4±0.05		

# **ORDERING INFORMATION**

Part Number	Size	Marking	QTY/Reel	Reel Size
SG2R05B090B	5.4*5.4*4.0mm	<b>%</b> SG090 <u>05</u>	800	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.