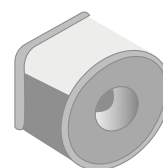
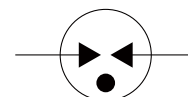


FEATURES

- | Surface Mounting Design 5.4*5.4*4.0mm
- | High Current Handling Capability 5000A @ 8/20 μ s
- | Low Capacitance and Insertion Loss
- | Quick Response and Long Service Life
- | Moisture sensitivity level: Level 1



5.4*5.4*4.0mm





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 Spark-over Voltage 1)	100V/s	72-108	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤650	
	At 1kV/μs	Typical values of distribution ≤600	
Discharge Current (8/20us) 2)	10 times	5	KA
AC Discharge Current	50Hz, 1S	5	A
Minimum Insulation Resistance	Test Voltage DC=50V	1	GΩ
Max. Capacitance 1MHz	VDC=0.5V	1	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

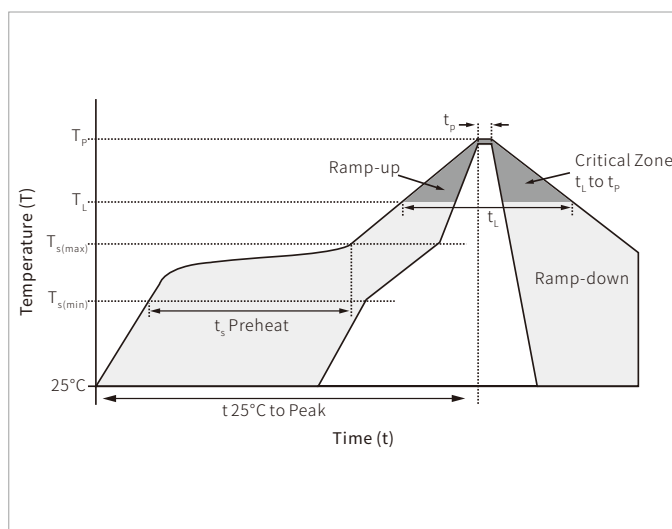
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

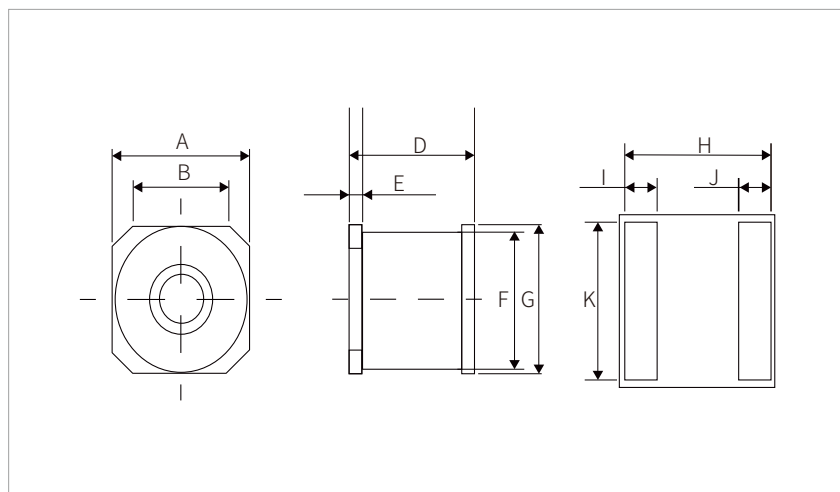
NOTE:Up-screen program can be specified by customer's request via contacting Semiware service

SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

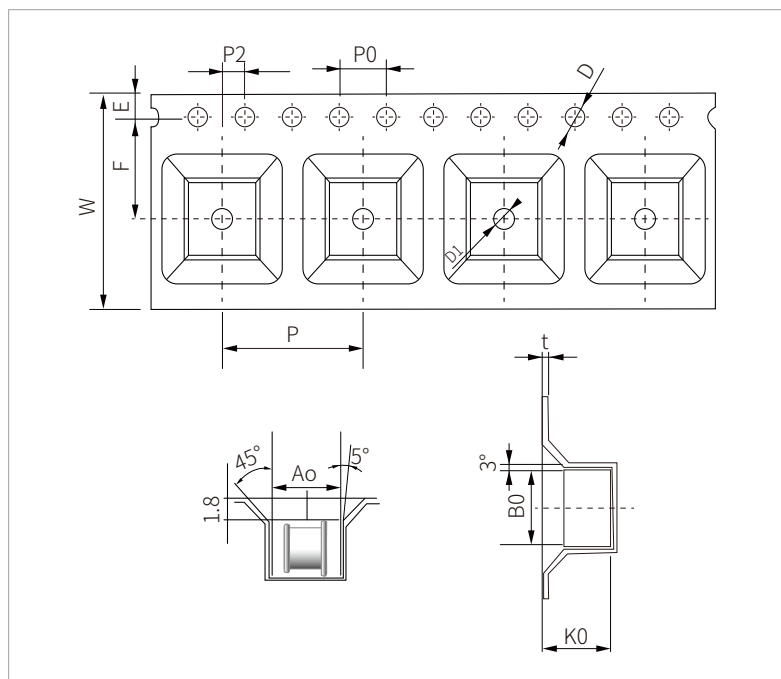


DIMENSIONS AND RECOMMENDED SOLDERING PAD




Ref.	mm
A	5.4±0.15
B	3.8
C	Φ6.6±0.2
D	4.0±0.2
E	0.5±0.1
F	Φ4.7±0.2
G	Φ5.4±0.15
H	4.7
I	1.3
J	1.3
K	3.9

PACKAGE REEL INFORMATION



Ref.	mm
W	16.0±0.3
P	12.0±0.1
E	1.75±0.1
F	7.5±0.1
P2	2.0±0.1
D	1.5±0.1
D1	1.5±0.1
P0	4.0±0.1
10P0	40.0±0.2
A0	5.7±0.1
B0	5.7±0.1
K0	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	 SG090 05	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

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.