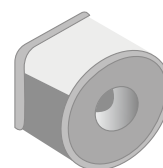
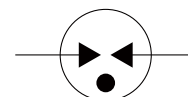


## FEATURES

- | Surface Mounting Design 5.4\*5.4\*4.0mm
- | High Current Handling Capability 5000A @ 8/20  $\mu$ 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	184-276	V
Impulse Spark-over Voltage	At 1kV/ $\mu$ s	for 99 % of measured values $\leq 650$	
	At 1kV/ $\mu$ s	Typical values of distribution $\leq 600$	
Discharge Current (8/20us) 2)	10 times	5	KA
AC Discharge Current	50Hz, 1S	5	A
Minimum Insulation Resistance	Test Voltage DC=100V	1	G $\Omega$
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

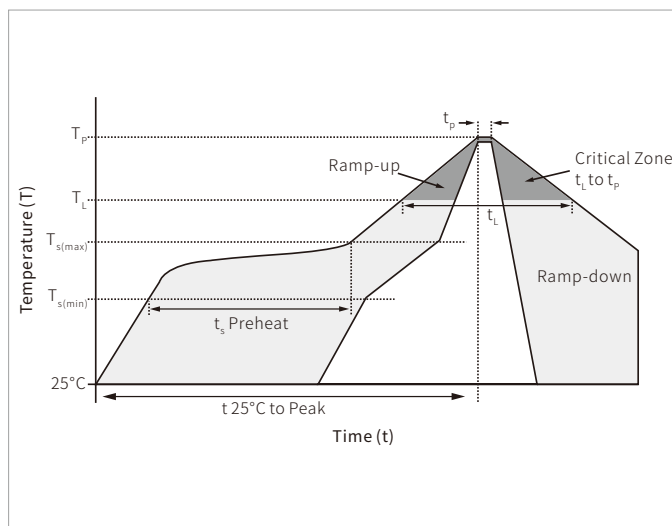
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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 $\pm$ 5°C; Time of dip soldering: 10s, 1time

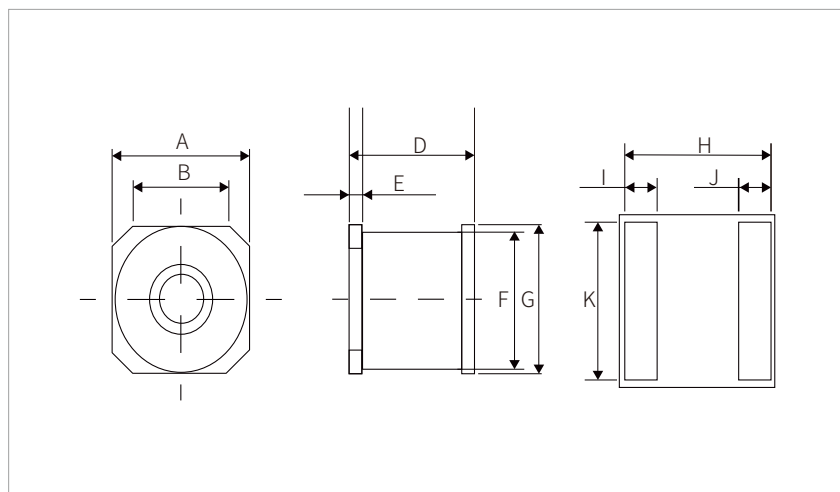
**NOTE:**Up-screen program can be specified by customer's request via contacting Semiware service

## 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

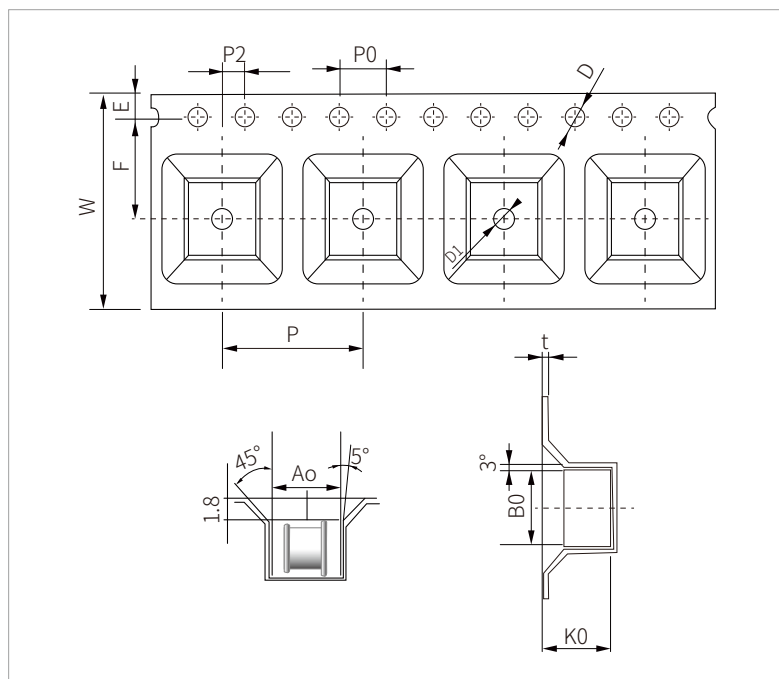


## DIMENSIONS AND RECOMMENDED SOLDERING PAD




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
SG2R05B230B	5.4*5.4*4.0mm	 SG230 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](mailto:sales18@semiware.com)

**Customer Service**

Tel: 86-21-5484-1001  
Email: [sales17@semiware.com](mailto:sales17@semiware.com)

**Technical Support**

Tel: 86-21-3463-7654  
Email: [fae01@semiware.com](mailto:fae01@semiware.com)

**Complaint & Suggestions**

Tel: 86-21-3463-7172  
Ext: 8868  
Email: [cs03@semiware.com](mailto:cs03@semiware.com)

**By QR Code**

Website



Wechat

To find your local partner within Semiware' s global website: [www.semiware.com](http://www.semiware.com)

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