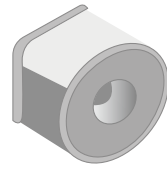
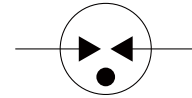


## FEATURES

- | 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	336-504	V
Impulse Spark-over Voltage	At 1kV/ $\mu$ s	for 99 % of measured values $\leq$ 700	
	At 1kV/ $\mu$ s	Typical values of distribution $\leq$ 650	
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	$^{\circ}$ C

1) In ionized mode

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

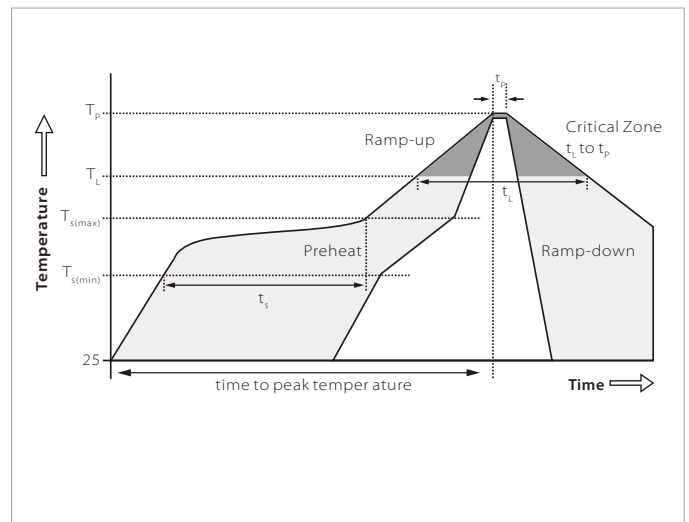
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

Testing items	Technical standards
High Temperature Storage Test	Temperature: 85 $^{\circ}$ C ; Time:2H
Low Temperature Storage Test	Temperature: -40 $^{\circ}$ C ; Time:2H
Vibration	Frequency: 10-500Hz ; Amplitude: 0.15mm ; Time:45min
Resistance of soldering heat	Temperature: 260 $\pm$ 5 $^{\circ}$ C; Time of dip soldering: 10s, 1time

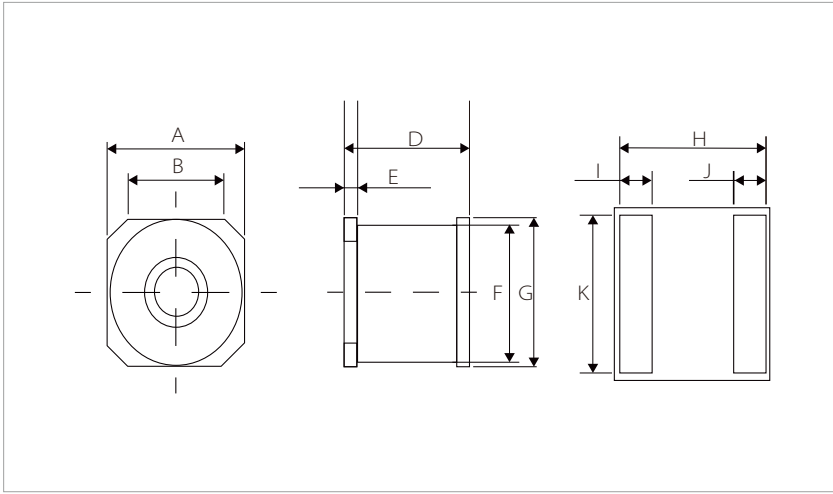
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

## REFLOW PROFILE

Reflow Condition		Pb-Free assembly
Pre Heat	Temperature Min	150 $^{\circ}$ C
	Temperature Max	200 $^{\circ}$ 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 $^{\circ}$ C/second max
Reflow	Temperature ( $T_L$ ) (Liquidus)	217 $^{\circ}$ C
	Temperature ( $T_L$ )	60-150 seconds
Peak Temperature ( $T_p$ )		245~260 $^{\circ}$ C
Time within 5 $^{\circ}$ C of actual peak Temperature ( $t_p$ )		30 seconds
Ramp-down Rate		6 $^{\circ}$ C/second max
Time 25 $^{\circ}$ C to peak Temperature ( $T_p$ )		8 minutes max.
Do not exceed		260 $^{\circ}$ C

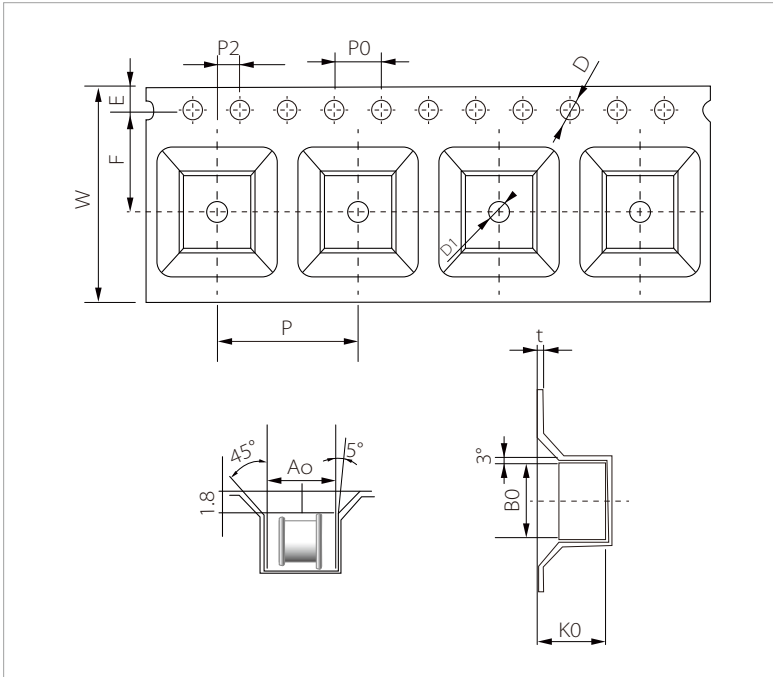


## PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD




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
SG2R05B420B	5.4*5.4*4.0mm	 SG420 05	800	13"

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**By QR Code**

Website



Wechat

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

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