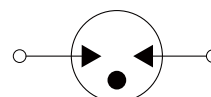


## FEATURES

- | Surface Mounting Design 5.0\*5.0mm
- | High Current Handling Capability 5,000A @ 8/20  $\mu$ s
- | Low Capacitance and Insertion Loss
- | Quick Response and Long Service Life
- | Moisture sensitivity level: Level 1



5.0\*5.0mm




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

## PRODUCT CHARACTERISTICS

Lead Material	Body Material	Terminal Finish
Copper or Fe-Ni alloy	Ceramics	100% Matte-Tin Plated

## ELECTRICAL PARAMETER

Parameter	Symbol	Limit	Unit
DC Blocking Voltage 1)	100V/s	336-504	V
Impulse Spark-over Voltage	At 1kV/ $\mu$ s	for 99 % of measured values $\leq$ 900	V
	At 1kV/ $\mu$ s	Typical values of distribution $\leq$ 850	V
Impulse Discharge Current 2)	8/20 $\mu$ s	5,000	A
Insulation Resistance	DC=100V	$\geq$ 1	G $\Omega$
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	$\leq$ 1.5	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

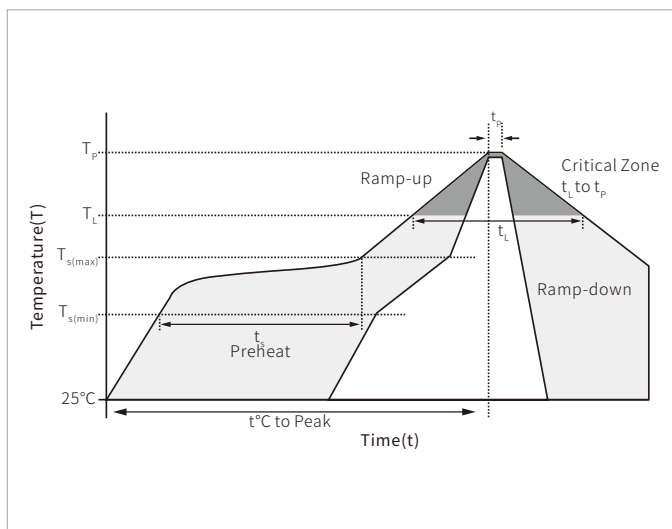
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

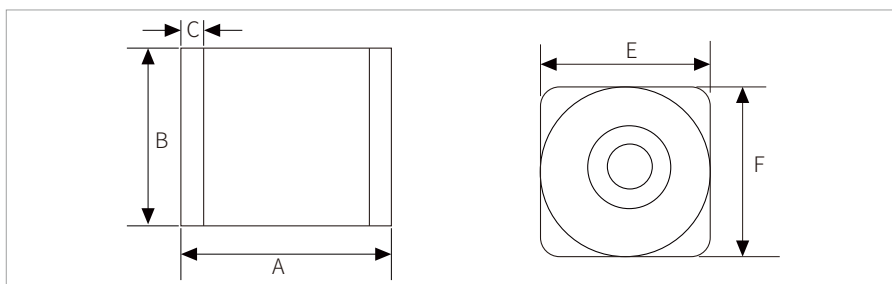
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

## REFLOW PROFILE

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min	150°C
	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
Reflow	Temperature ( $T_L$ ) (Liquidus)	217°C
	Time(min to max)( $t_s$ )	60 – 150 seconds
Peak Temperature ( $T_p$ )		260 °C
Time within 5°C of actual peak Temperature ( $t_p$ )		10-30 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature ( $T_p$ )		8 minutes max.
Do not exceed		260°C



## PRODUCT DIMENSIONS



Ref.	Outline Dimensions
	Millimeters
A	5.0±0.3
B	5.0±0.3
C	0.5±0.1
E	5.0±0.3
F	5.0±0.3

## ORDERING INFORMATION

Part Number	Size	Marking	QTY/Reel	Reel Size
SG2D05B420	5.0*5.0mm	 SG420 05	1000PCS	13"

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**Customer Service**

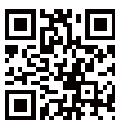
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**By QR Code**

Website



Wechat

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

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