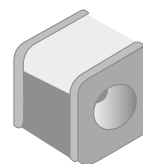
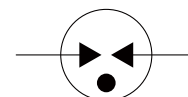


## FEATURES

- | Surface Mounting Design 5.0\*5.0\*4.2mm
- | 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



5.0\*5.0\*4.2mm





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 Blocking Voltage 1)	100V/s	280-420	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	5000	A
AC Discharge Current	50Hz, 1S, 10times	5	A
Insulation Resistance	DC=100V	$\geq$ 1	G $\Omega$
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	$\leq$ 0.8	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

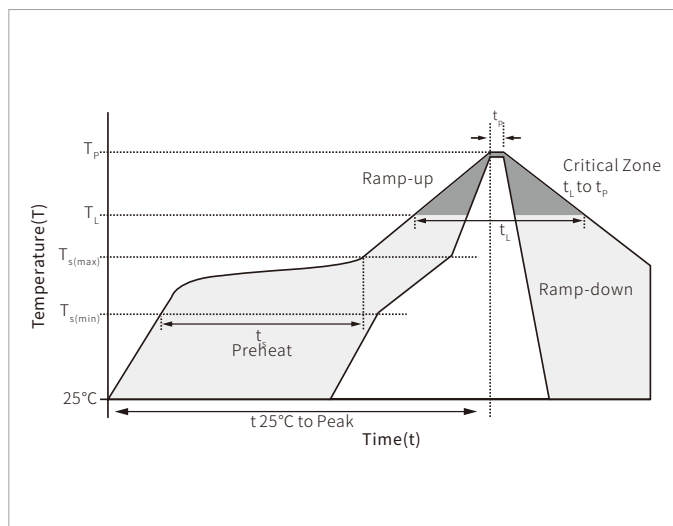
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

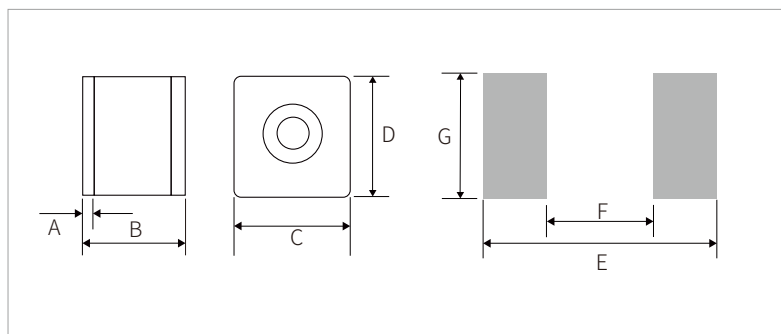
**NOTE:**Up-screen program can be specified by customer's request via contacting Semiware service

## 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 <sub>L</sub> ) to peak T <sub>s(max)</sub> to T <sub>L</sub> - Ramp-up Rate		3°C/second max
Reflow	Temperature (T <sub>L</sub> ) (Liquidus)	217°C
	Time(min to max)(t <sub>s</sub> )	60 – 150 seconds
Peak Temperature (T <sub>p</sub> )		260 °C
Time within 5°C of actual peak Temperature (t <sub>p</sub> )		20-40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T <sub>p</sub> )		8 minutes max.
Do not exceed		260°C

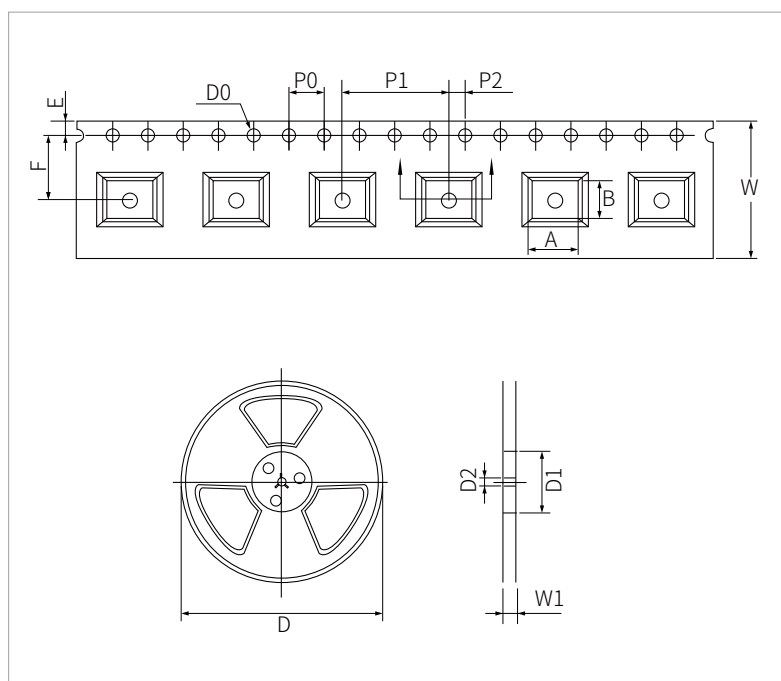


## DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm
A	$0.5 \pm 0.1$
B	$4.2 \pm 0.3$
C	$5.0 \pm 0.2$
D	$5.0 \pm 0.2$
E	4.7
F	2.5
G	5.5

## PACKAGE REEL INFORMATION



Ref.	mm	inch
A	$5.5 \pm 0.1$	$0.217 \pm 0.004$
B	$4.7 \pm 0.2$	$0.185 \pm 0.008$
D0	$\Phi 1.5 \pm 0.1$	$\Phi 0.059 \pm 0.004$
P0	$4.0 \pm 0.1$	$0.157 \pm 0.004$
P1	$12.0 \pm 0.1$	$0.472 \pm 0.004$
P2	$2.0 \pm 0.1$	$0.079 \pm 0.004$
E	$1.75 \pm 0.1$	$0.069 \pm 0.004$
F	$7.5 \pm 0.1$	$0.295 \pm 0.004$
W	$16.0 \pm 0.3$	$0.630 \pm 0.012$
D	$\Phi 330.0$	$\Phi 13.0$
D1	$\Phi 50 \text{Min}$	$\Phi 1.97 \text{Min}$
D2	$\Phi 13 \pm 0.15$	$0.512 \pm 0.006$
W1	$16.8 \pm 2.0$	$0.661 \pm 0.079$

## ORDERING INFORMATION

Part Number	Size	QTY/Reel	Reel Size
SG5042B350	5.0*5.0*4.2mm	1000	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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