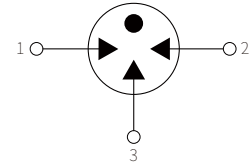


## FEATURES

- | Size Design 3.5\*3.5\*6.8mm
- | High Current Handling Capability 6,000A @ 8/20  $\mu$ s
- | Low Capacitance and Insertion Loss
- | Quick Response and Long Service Life
- | Moisture sensitivity level: Level 1



3.5\*3.5\*6.8mm




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	Rating	Unit
DC Blocking Voltage 1)	100V/s	72-108	V
Impulse Spark-over Voltage	At 1kV/ $\mu$ s	for 99 % of measured values $\leq$ 650	V
	At 1kV/ $\mu$ s	Typical values of distribution $\leq$ 600	V
Impulse Discharge Current 2)	8/20 $\mu$ s	6	KA
Insulation Resistance	DC=100V	$\geq$ 1	G $\Omega$
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	$\leq$ 1	pF
Operating and Storage Temperature		-40~90	$^{\circ}$ C

1) In ionized mode

2) Total Currents through center electrode, half value through each Tip electrode

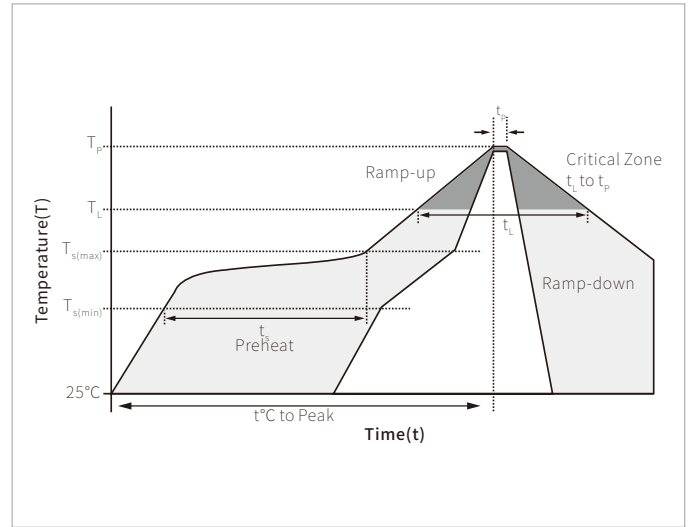
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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 $^{\circ}$ C; Time of dip soldering: 10s,1time

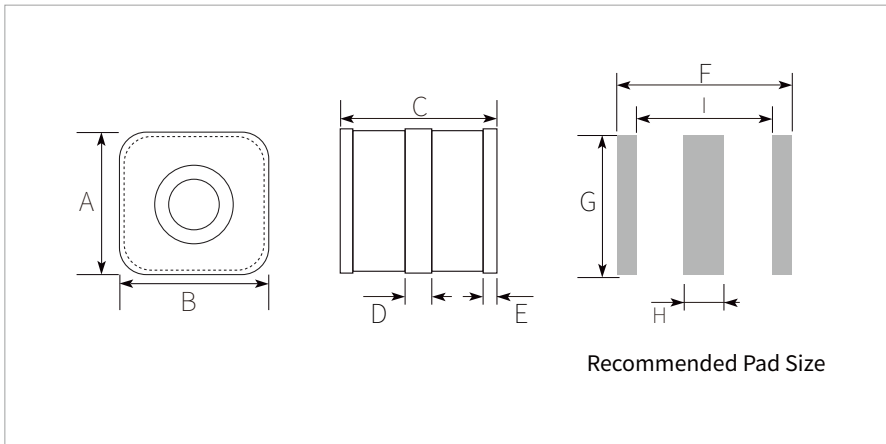
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

## REFLOW PROFILE

Reflow Condition		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 ( $t_p$ )		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

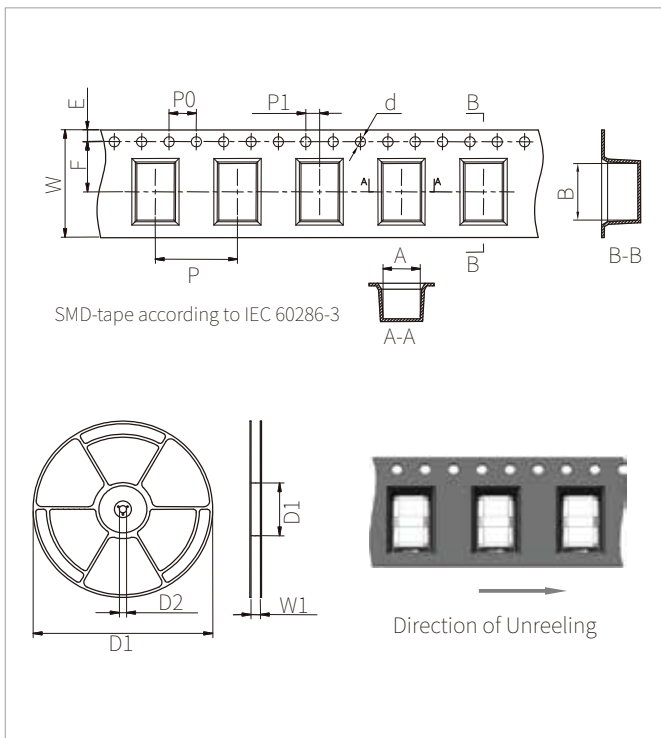


## PRODUCT DIMENSIONS



Ref.	Outline Dimensions
	Millimeters
A	3.5±0.2
B	3.5±0.2
C	6.8±0.2
D	1.2±0.1
E	0.4±0.1
F	Max.8.1
G	Max.2.5
H	Max.1.8
I	Min.6.2

## TAPE AND REEL SPECIFICATION



Ref.	Dimensions	
	Millimeters	Inches
A	3.9±0.2	0.154±0.008
B	7.0±0.2	0.276±0.008
d	Φ1.5±0.1	Φ0.059±0.004
E	1.75±0.1	0.069±0.004
F	7.5±0.1	0.295±0.002
P	8.0±0.1	0.315±0.004
P0	4.0±0.1	0.157±0.004
P1	2.0±0.1	0.079±0.004
W	16.0±0.3	0.63±0.012
D	Φ330.0	Φ13.0
D1	Φ50Min	Φ1.97Min
D2	Φ13±0.15	Φ0.512±0.006
W1	20.8±2.0	0.819±0.079

## ORDERING INFORMATION

Part Number	Size	QTY/Reel	Reel Size
SG3D03B090	3.5*3.5*6.8mm	2500PCS	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 network: [www.semiware.com](http://www.semiware.com)

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