

## FEATURES

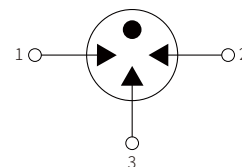
- | Size Design 8.0\*8.0\*10.0mm
- | High Current Handling Capability 20000A @ 8/20  $\mu$ s
- | Low Capacitance and Insertion Loss
- | Quick Response and Long Service Life
- | Moisture sensitivity level: Level 1



8.0\*8.0\*10.0mm



## APPLICATION INFORMATION

- | Communication equipment.
- | Repeaters, Modems
- | Telephone Interface, Line cards.
- | Data communication equipment.



Schematic Symbol

## 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	Symbol	Rating	Unit
DC Spark-over Voltage 1)	100V/s	72-108	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤600	
	At 1kV/μs	Typical values of distribution ≤550	
Discharge Current (8/20us) 2)	10 times	20	KA
AC Discharge Current	50Hz, 1S	20	A
Minimum Insulation Resistance	Test Voltage DC=100V	1	GΩ
Max. Capacitance 1MHz	V <sub>DC</sub> =0.5V	2.0	pF
Operating and Storage Temperature		-40~125	°C

1) In ionized mode

2) Terms and waveforms in accordance with ITU-T Rec. K. 12; IIEC 61643-311

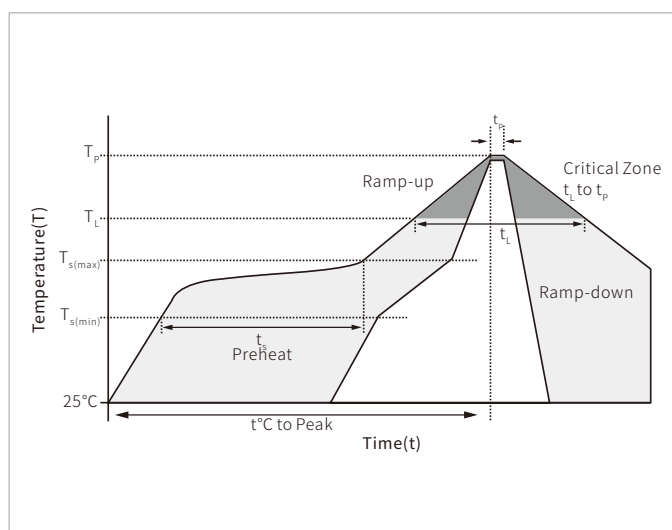
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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°C; Time of dip soldering:10s,1time

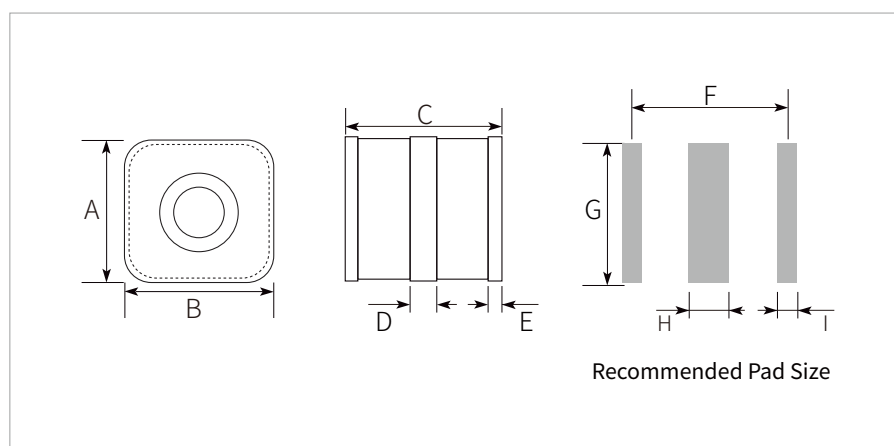
**NOTE:**Up-screen program can be specified by customer' s request via contacting Semiware service

## 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

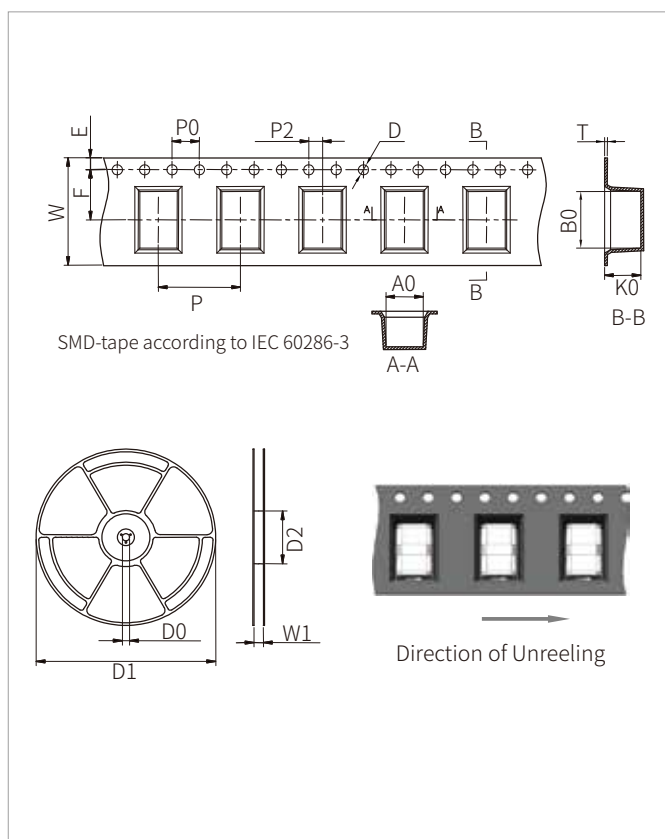


## PRODUCT DIMENSIONS



Ref.	Outline Dimensions
	Millimeters
A	8.0±0.5
B	8.0±0.5
C	10±0.5
D	1.5±0.2
E	0.5±0.1
F	10.0
G	8.0
H	3.0
I	1.5

## TAPE AND REEL SPECIFICATION



Ref.	Dimensions	
	Millimeters	Inches
W	$16 \pm 0.3$	$0.630 \pm 0.012$
A0	$5.4 \pm 0.1$	$0.213 \pm 0.004$
B0	$8.4 \pm 0.1$	$0.331 \pm 0.004$
K0	$5.3 \pm 0.1$	$0.209 \pm 0.004$
P	$12 \pm 0.1$	$0.472 \pm 0.004$
F	$7.5 \pm 0.1$	$0.295 \pm 0.004$
E	$1.75 \pm 0.1$	$0.069 \pm 0.004$
D	$1.5 + 0.1 / - 0.0$	$0.059 + 0.004 / - 0.0$
P0	$4 \pm 0.1$	$0.157 \pm 0.004$
P2	$2 \pm 0.1$	$0.079 \pm 0.004$
T	$0.4 \pm 0.1$	$0.016 \pm 0.004$
D0	$13.3 \pm 0.15$	$0.524 \pm 0.006$
D1	$330 \pm 2$	$12.992 \pm 0.079$
D2	$100 + 1 / - 2$	$3.937 + 0.039 / - 0.079$
W1	$16.5 \pm 0.4$	$0.65 \pm 0.016$

## ORDERING INFORMATION

Part Number	Size	QTY/Reel	Reel Size
SG3R08B090C	8.0*8.0*10.0mm	1000PCS	13"

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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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