

## FEATURES

- | Size Design 8.0\*8.0\*10.0mm

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- | High Current Handling Capability 20000A @ 8/20  $\mu$ s

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- | Low Capacitance and Insertion Loss

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- | Quick Response and Long Service Life

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- | Moisture sensitivity level: Level 1

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8.0\*8.0\*10.0mm

## APPLICATION INFORMATION

- | Communication equipment.

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- | Repeaters, Modems

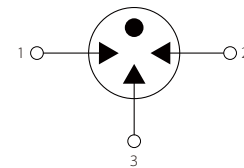
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- | Telephone Interface, Line cards.

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- | Data communication equipment.

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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	$V_{DC}=0.5V$	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

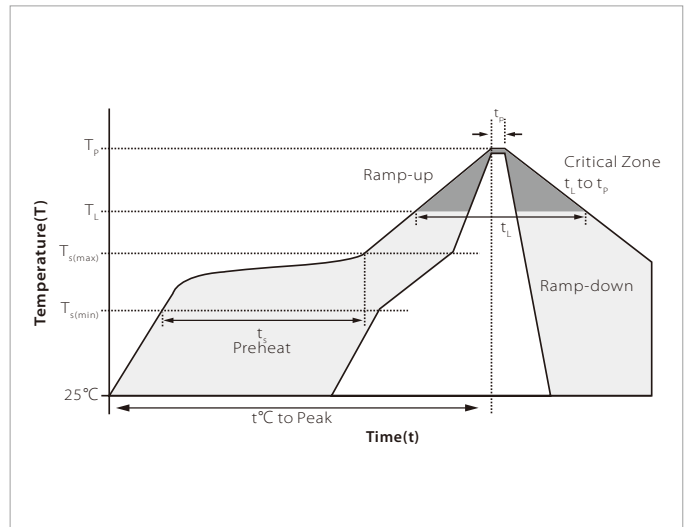
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

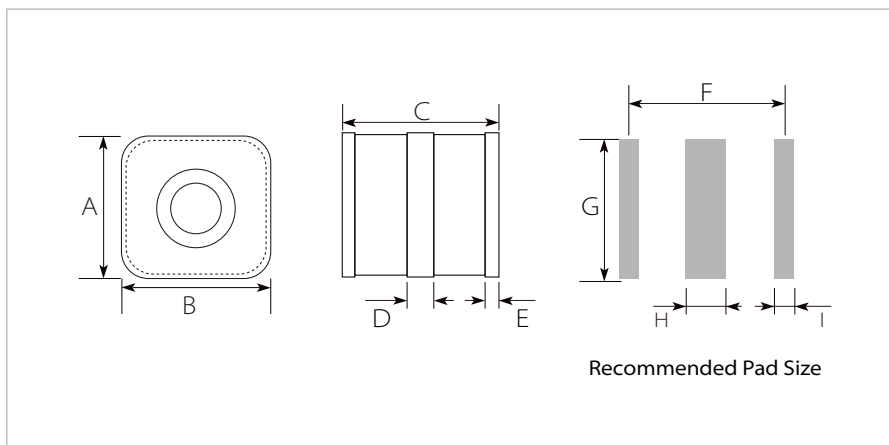
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

## 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 $T_s(\text{max})$ 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

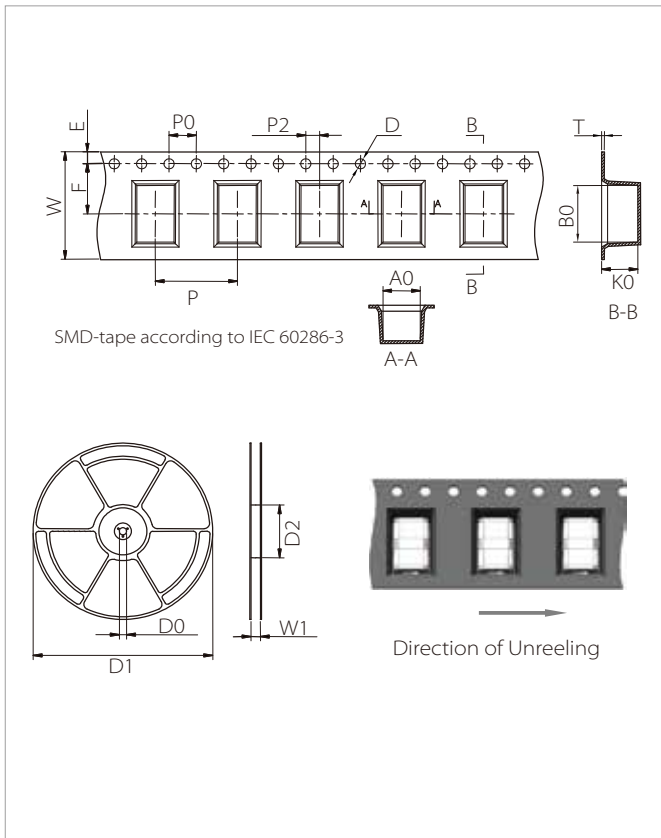


## PRODUCT DIMENSIONS



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

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