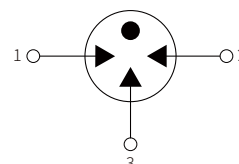


## FEATURES

- | Surface Mounting Design 5.0\*5.0\*7.3mm
- | 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\*5.0\*7.3mm





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	Symbol	Limit	Unit
DC Blocking Voltage 1)	100V/s	63-117	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤ 600	V
	At 1kV/μs	Typical values of distribution ≤ 550	V
Impulse Discharge Current 2)	8/20μs	5,000	A
Insulation Resistance	DC=50V	≥ 1	GΩ
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	≤ 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

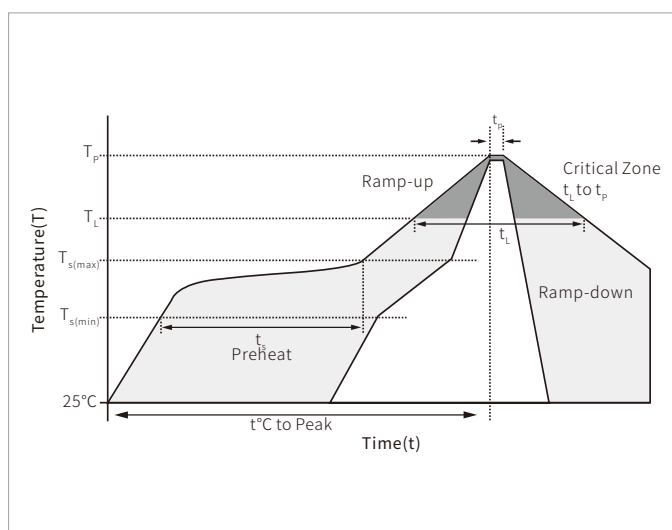
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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±5°C; Time of dip soldering: 10s, 1time

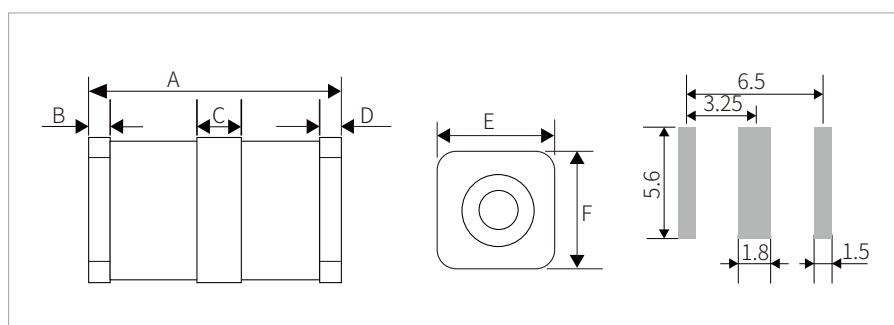
**NOTE:**Up-screen program can be specified by customer' s request via contacting Semiware service

## 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

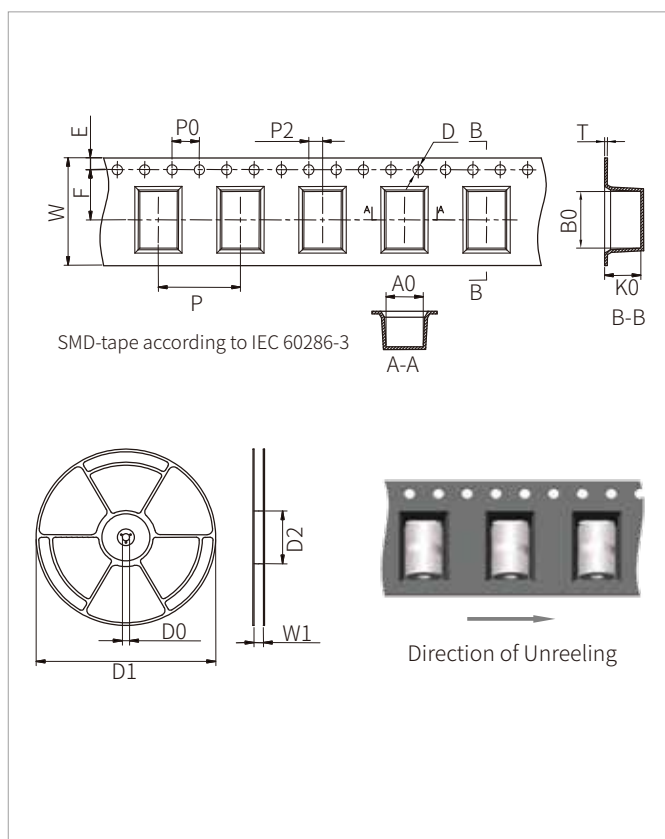


## DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	Outline Dimensions
	Millimeters
A	7.3±0.2
B	0.5±0.2
C	1.0±0.2
D	0.5±0.2
E	5.0±0.2
F	5.0±0.2

## 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	Marking	QTY/Reel	Reel Size
SG3D05B090A	5.0*5.0*7.3mm	SG3D05B090	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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