

FEATURES

- | Size Design 5.0*5.0*7.5mm

- | High Current Handling Capability 5000A @ 8/20 μ s

- | Low Capacitance and Insertion Loss

- | Quick Response and Long Service Life

- | Moisture sensitivity level: Level 1



5.0*5.0*7.5mm

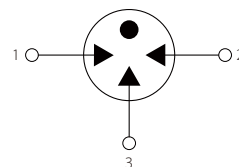
APPLICATION INFORMATION

- | 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 Blocking Voltage 1)	100V/s	200-300	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤700	V
	At 1kV/μs	Typical values of distribution ≤600	V
Impulse Discharge Current 2)	8/20μs	5	KA
Insulation Resistance	DC=100V	≥ 1	GΩ
Capacitance at 1MHz	V _{DC} =0.5V	≤ 1	pF
Operating and Storage Temperature		-40~90	°C

1) In ionized mode

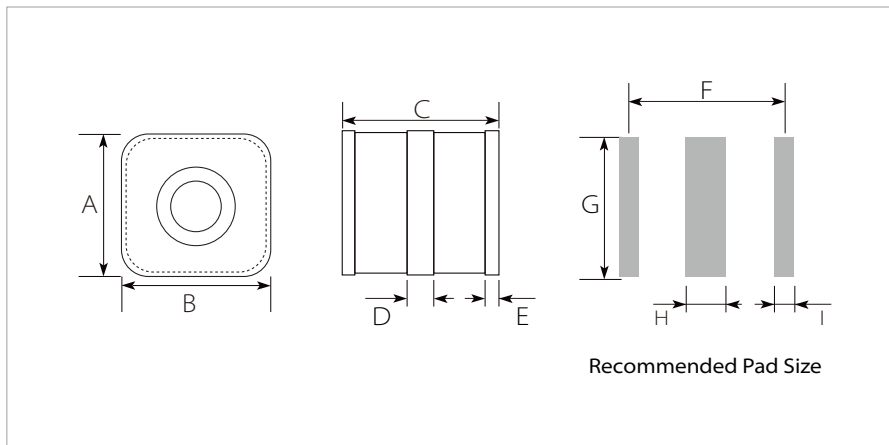
2) Terms and waveforms in accordance with ITU-T Rec. K. 12; IIEC 61643-311

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

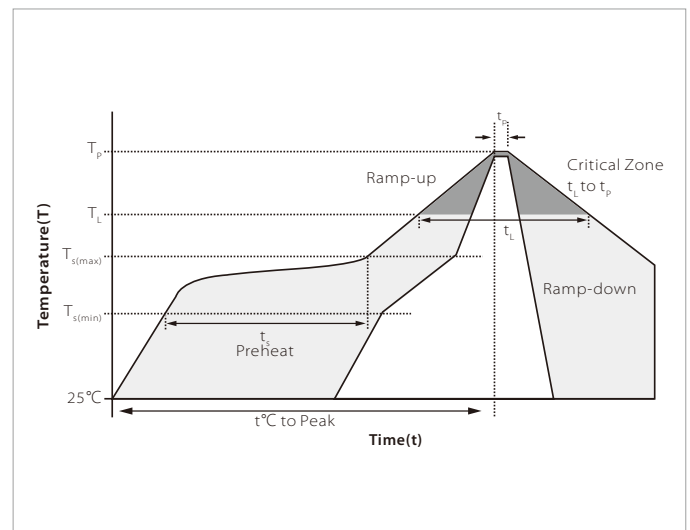
PRODUCT DIMENSIONS



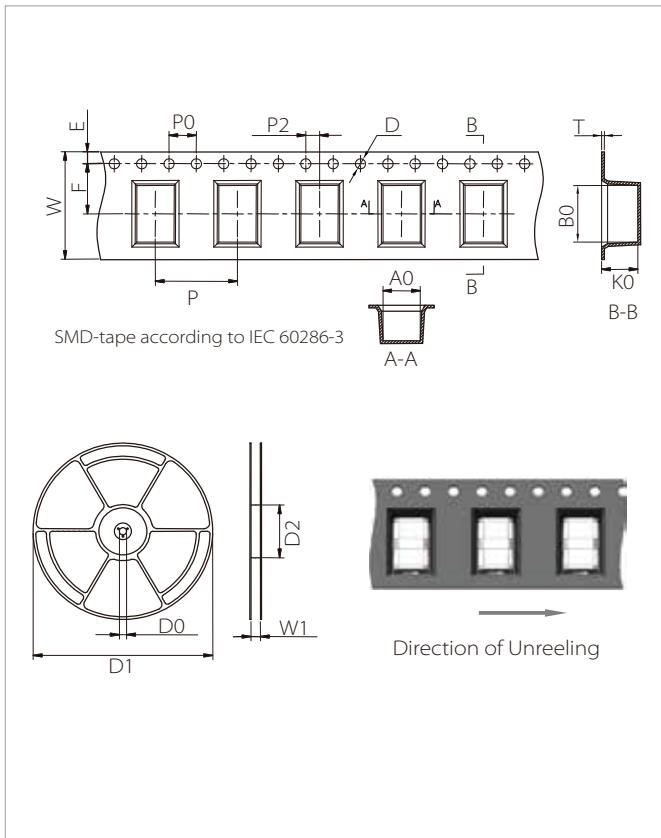
Ref.	Outline Dimensions
	Millimeters
A	5.0±0.2
B	5.0±0.2
C	7.5±0.3
D	1.5±0.3
E	0.5±0.2
F	6.4
G	5.5
H	2.8
I	1.6

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



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
SG3D05B250B	5.0*5.0*7.5mm	1000PCS	13"

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