

FEATURES

Size Design 3.5*3.5*6.8mm

- High Current Handling Capability 6,000A @ 8/20 μs
- Low Capacitance and Insertion Loss
- Quick Response and Long Service Life
- Moisture sensitivity level:Level 1

APPLICATION INFORMATION

Communication equipment.

- Repeaters, Modems
- Telephone Interface,Line cards.

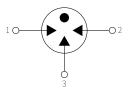
Data communication equipment.

3

SG3D03B090

Gas Discharge Tube

3.5*3.5*6.8mm



Schematic Symbol

lcon	Solderability	
RoHS	Compliance with 2011/65/EU	
HF	Compliance with IEC61249-2-21:2003	
Ø	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
	At 1kV/µs	for 99 % of measured values ≤650	V
Impulse Spark-over Voltage	At 1kV/µs	Typical values of distribution ≤600	V
Impulse Discharge Current 2)	8/20µs	6	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) Total Currents through center electrode, half value through each Tip electrode

ENVIRONMENTAL RELIABILITY CHARACTERISTICS

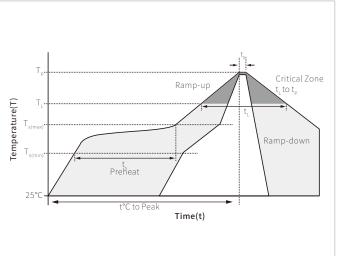
Testing items	Technical standards	
High Temperature Storage Test	ature Storage Test Temperature: 85°C ; Time:2H	
Low Temperature Storage Test Temperature: -40°C ; Time:2H		
Vibration	Frequency: 10-500Hz ; Amplitude:0.15mm ; Time:45min	
Resistance of soldering heat Temperature: 260°C; Time of dip soldering:10s,1time		

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

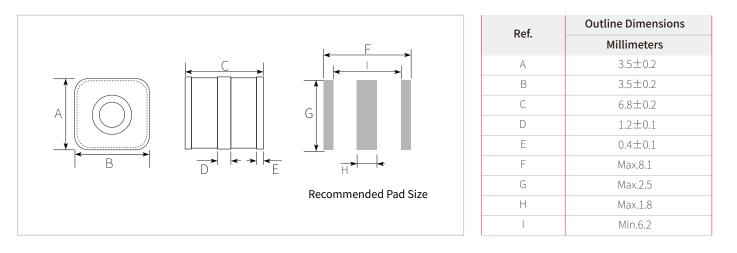


REFLOW PROFILE

	Reflow Condition	Lead-free assembly
	Temperature Min	150°C
Pre Heat	Temperature Max	200°C
	Time(min to max)	60~180 secs
Average ra	mp up rate (Liquidus)Temp (T _L) to peak	3°C/second max
	T _s (max)to T _L - Ramp-up Rate	,
Reflow	Temperature (T _L) (Liquidus)	217°C
Rellow	Time(min to max)(t _s)	60~150 seconds
Peak Tem	perature (T _P)	260 °C
Time with	in 5°C of actual peak Temperature (tp)	20~40 seconds
Ramp-do	wn Rate	6°C/second max
Time 25°C	to peak Temperature (T _P)	8 minutes max.
Donotex	ceed	260°C

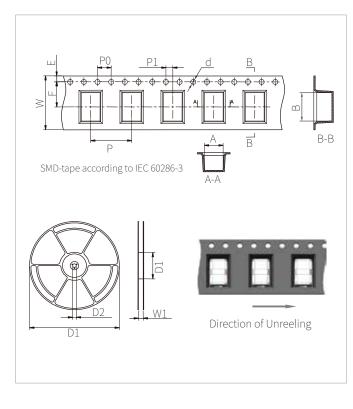


PRODUCT DIMENSIONS





TAPE AND REEL SPECIFICATION



Ref.	Dimensions		
Kel.	Millimeters	Inches	
A	3.9±0.2	0.154±0.008	
В	7.0±0.2	0.276±0.008	
d	Ф1.5±0.1	Ф0.059±0.004	
E	1.75±0.1	0.069±0.004	
F	7.5±0.1	0.295±0.002	
Р	8.0±0.1	0.315±0.004	
PO	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	Ф330.0	Ф13.0	
D1	Ф50Min	Ф1.97Min	
D2	Ф13±0.15	Ф0.512±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

Customer Service

Tel: 86-21-5484-1001 Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654 Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172 Ext: 8868 Email: cs03@semiware.com

By QR Code





Website

Wechat

To find your local partner within Semiware's global network: www.semiware.com © 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and theconsequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.

SG3D03B090

Gas Discharge Tube