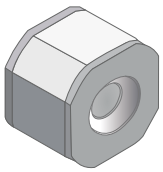
SG2R09B150

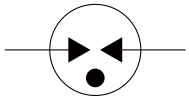
Surface Mounted Gas Discharge Tube

FEATURES

- Surface Mounting Design 8.3*8.3*6.0mm
- High Current Handling Capability 20000A @ 8/20 μs
- Low Capacitance and Insertion Loss
- Quick Response and Long Service Life
- Moisture sensitivity level：Level 1



8.3*8.3*6.0mm



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
Pb	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	Condition	Rating	Unit
DC Blocking Voltage 1)	100V/s	120-180	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ⩽ 500	V
	At 1kV/μs	Typical values of distribution ⩽ 450	V
Impulse Discharge Current 2)	8/20μs	20000	A
AC Discharge Current	50Hz, 1S, 10times	20	A
Insulation Resistance	DC=50V	⩾ 1	GΩ
Capacitance at 1MHz	V_{DC}=0.3V	⩽ 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

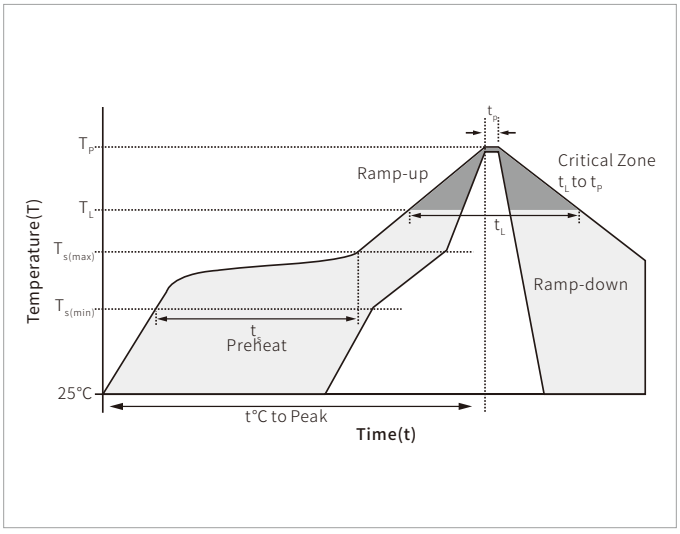
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

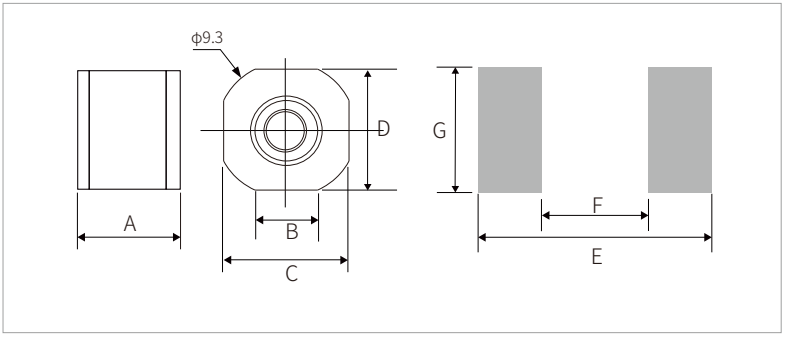
NOTE: Up-screen program can be specified by customer' s request via contacting Semiware service

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		3°C/second max
T_s(max)to T_L - Ramp-up Rate		
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 (tp)		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

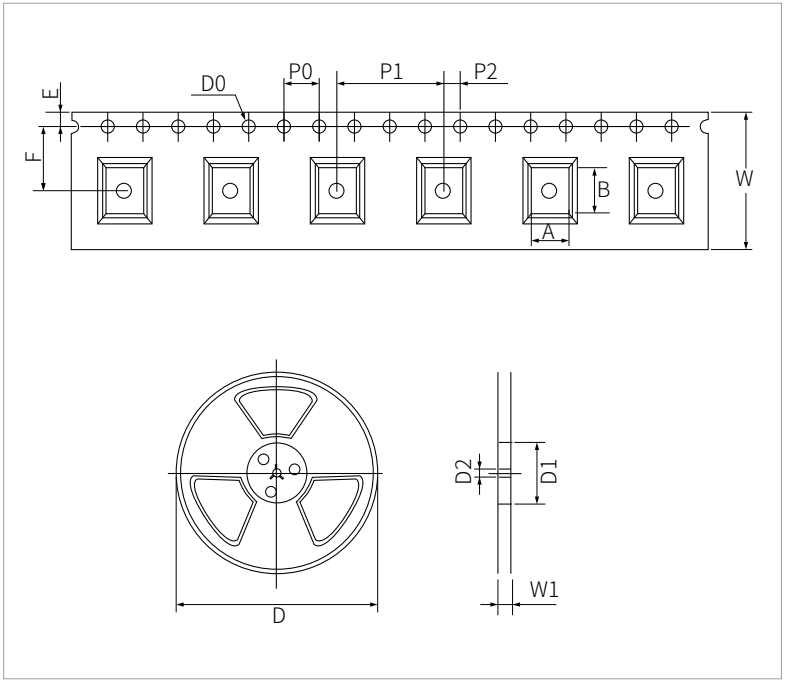


DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm
A	6.0±0.2
B	4.2±0.1
C	8.3±0.2
D	8.3±0.2
E	7.0
F	4.0
G	8.0

PACKAGE REEL INFORMATION



Ref.	mm	inch
A	6.5±0.1	0.256±0.004
B	8.4±0.1	0.331±0.004
D0	Φ 1.5±0.1	Φ 0.059±0.004
P0	4.0±0.1	0.157±0.004
P1	12.0±0.1	0.472±0.004
P2	2.0±0.1	0.079±0.004
E	1.75±0.1	0.069±0.004
F	7.5±0.1	0.295±0.004
W	16.5±0.4	0.650±0.016
D	Φ 330.0	Φ 13.0
D1	Φ 50Min	Φ 1.97Min
D2	Φ 13±0.15	0.512±0.006
W1	16.8±2.0	0.661±0.079

ORDERING INFORMATION

Part Number	Size	QTY/Reel	Reel Size
SG2R09B150	8.3*8.3*6.0mm	600pcs	13”

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