SEMIWARE®

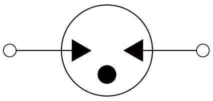
TPSG2R05B090C

Surface Mounted Gas Discharge Tube

FEATURES

- Surface Mounting Design 5.5*5.5*6.0mm
- High Current Handling Capability 10,000A @ 8/20 μs
- Low Capacitance and Insertion Loss
- Quick Response and Long Service Life
- Moisture sensitivity level：Level 1
- High Reliability and Automobile Grade(AEC-Q200)

5.5*5.5*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

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	72-108	V
Impulse Spark-over Voltage	At 1kV/µs	for 99 % of measured values ⩽ 900	V
	At 1kV/µs	Typical values of distribution ⩽850	V
Impulse Discharge Current 2)	8/20µs	10,000	A
Insulation Resistance	DC=50V	⩾ 1	GΩ
Capacitance at 1MHz	V_{DC}=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

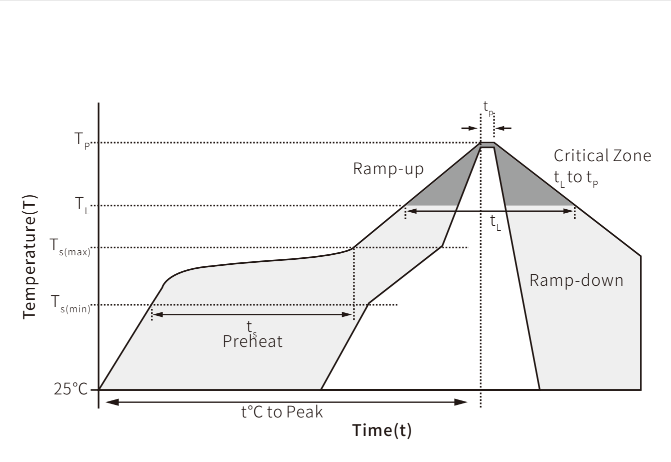
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

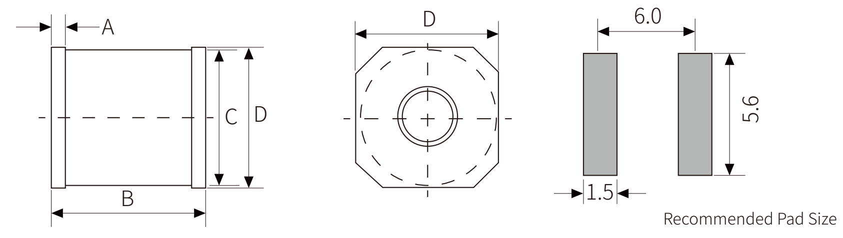
NOTE: Up-screen program can be specified by customer’ s request via contacting Semiware service

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 (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.	Outline Dimensions
	Millimeters
A	0.5±0.2
B	6.0±0.2
C	5.4±0.2
D	5.5±0.2

ORDERING INFORMATION

Part Number	Size	Marking	QTY/Reel	Reel Size
TPSG2R05B090C	5.5*5.5*6.0mm	SG090 05	1000PCS	13”

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By QR Code

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