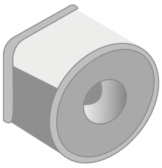
SEMIWARE®

SG2R08B470A

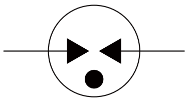
Surface Mounted Gas Discharge Tube

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
RU	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 Spark-over Voltage 1)	100V/s	376-564	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ⩽1000	
	At 1kV/μs	Typical values of distribution ⩽950	
Discharge Current (8/20us) 2)	10 times	20	KA
AC Discharge Current	50Hz, 1S	20	A
Minimum Insulation Resistance	Test Voltage DC=250V	1	GΩ
Max. Capacitance 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

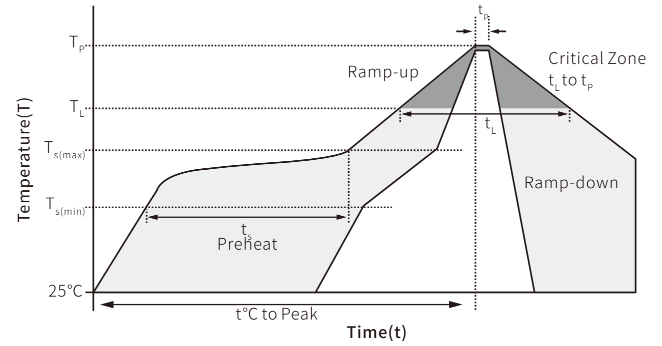
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

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

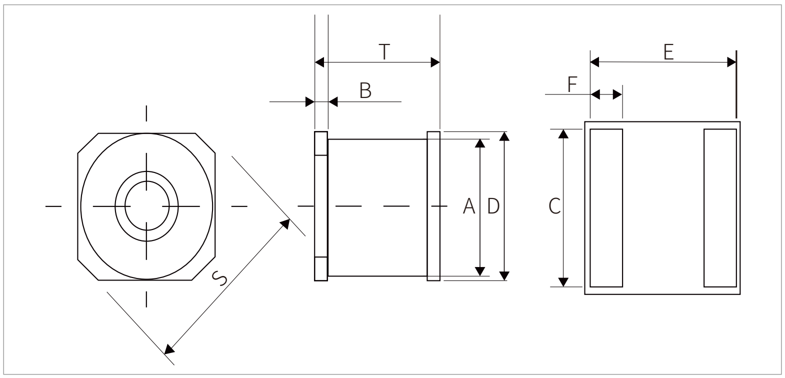
NOTE: Up-screen program can be specified by customer’ s request via contacting Semiware service

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		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

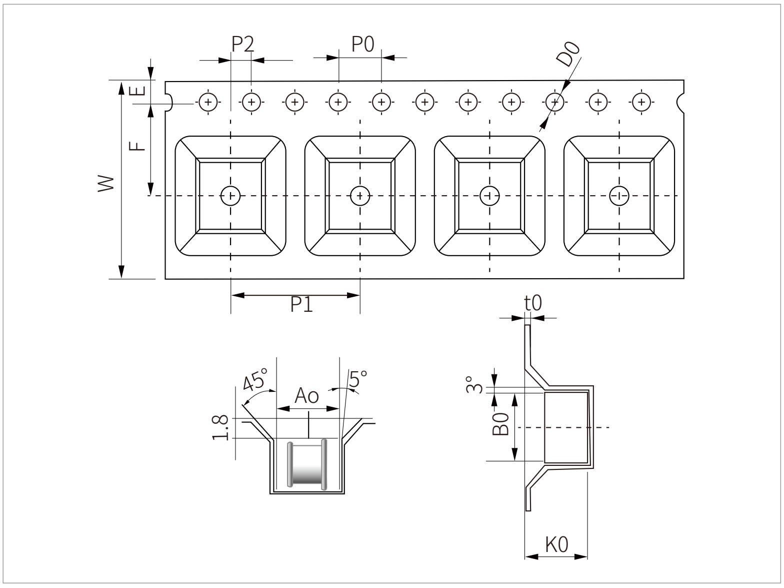


DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm
A	8.0±0.2
B	0.5±0.1
C	9.0
D	8.3±0.2
E	6.7
F	1.2
T	6.0±0.25
S	9.0±0.4

PACKAGE REEL INFORMATION



Ref.	mm
W	16.0±0.3
P0	4.0±0.1
P1	12.0±0.1
P2	2.0±0.1
D0	1.55±0.05
E	1.75±0.1
F	7.5±0.1
A0	6.35±0.1
K0	6.55±0.1
B0	8.65±0.1
t0	0.5±0.1

ORDERING INFORMATION

Part Number	Size	Marking	QTY/Reel	Reel Size
SG2R08B470A	8.3*8.3*6.0mm	SG470 08	600	13”

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By QR Code

Website

Wechat

To find your local partner within Semiware' s global website: www.semiware.com