

| Moisture sensitivity level: Level 1

## **FEATURES**

Surface Mounting Design 8.3\*8.3\*6.0mm

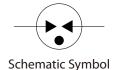
High Current Handling Capability 20000A @ 8/20 µs

Low Capacitance and Insertion Loss

Quick Response and Long Service Life



8.3\*8.3\*6.0mm



## **APPLICATION INFORMATION**

Communication equipment.	
Repeaters, Modems	
Telephone Interface,Line cards.	
Data communication equipment.	

## **AGENCY APPROVALS**

lcon	Solderability	
RoHS	Compliance with 2011/65/EU	
HF	Compliance with IEC61249-2-21:2003	
Pb	Mean lead free	
<b>R</b> .	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	320-480	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤ 800	V
impuise Spaik-Over voltage	At 1kV/μs	Typical values of distribution ≤ 750	V
Impulse Discharge Current 2)	8/20µs	20000	А
AC Discharge Current	50Hz, 1S, 10times	20	А
Insulation Resistance	DC=100V	≥ 1	GΩ
Capacitance at 1MHz	V <sub>DC</sub> =0.3V	≤ 1.5	pF
Operating and Storage Temperature		-40-125	°C

<sup>1)</sup> In ionized mode

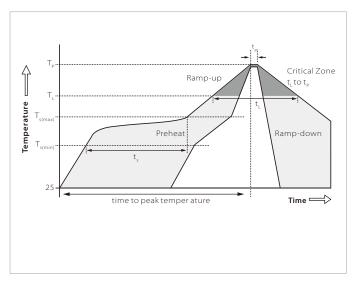
# **ENVIRONMENTAL RELIABILITY CHARACTERISTICS**

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**

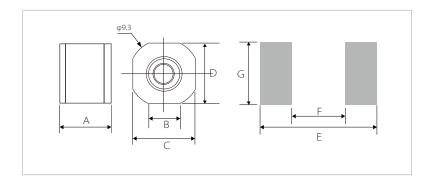
Reflow Condition		Lead-free assembly	
	Temperature Min	150°C	
Pre Heat	Temperature Max	200°C	
	Time(min to max)	60-180 secs	
Average ramp up rate (Liquidus)Temp (T <sub>L</sub> ) to peak		3°C/second max	
T <sub>s</sub> (max)to T <sub>L</sub> - Ramp-up Rate		5 C/SECUTIO ITIAX	
Reflow	Temperature (T <sub>L</sub> ) (Liquidus)	217℃	
Kellow	Temperature $(T_L)$	60-150 seconds	
PeakTem	perature (T♭)	260+0/-5 °C	
Time within 5°C of actual peak Temperature (tp)		~10 seconds	
Ramp-down Rate		6°C/second max	
Time 25°C to peak Temperature (T,)		8 minutes max.	
Do not ex	kceed	260°C	



<sup>2)</sup> Terms and waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21

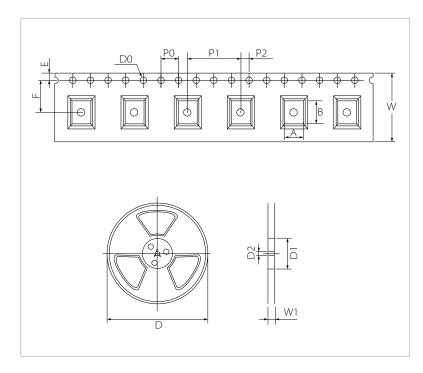


## PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	mm
А	6.0±0.2
В	4.2±0.1
С	8.3±0.2
D	8.3±0.2
Е	7.0
F	4.0
G	8.0

## **PACKAGE REEL INFORMATION**



Ref.	mm	inch
А	6.5±0.1	0.256±0.004
В	8.4±0.1	0.331±0.004
D0	Ф 1.5±0.1	Φ 0.059±0.004
PO	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	Ф 330.0	Ф 13.0
D1	Ф 50Min	Ф 1.97Min
D2	Ф 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
SG2R09B400	8.3*8.3*6.0mm	600pcs	13"



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