

| Moisture sensitivity level: Level 1

### **FEATURES**

Surface Mounting Design 5.0\*5.0mm

High Current Handling Capability 5,000A @ 8/20 µs

Low Capacitance and Insertion Loss

Quick Response and Long Service Life



5.0\*5.0mm



Schematic Symbol

## **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	
<b>%</b>	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 ≤ 650	V
impuise spaik-over voltage	At 1kV/μs	Typical values of distribution ≤ 600	V
Impulse Discharge Current 2)	8/20µs	5,000	А
Insulation Resistance	DC=50V	≥ 1	GΩ
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	≤ 1.5	
Operating And Storage Temperature		-40-125	°C

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

# **ENVIRONMENTAL RELIABILITY CHARACTERISTICS**

Testing items	esting 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	

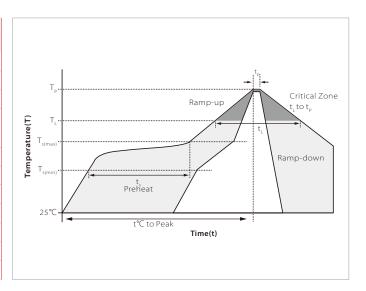
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

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

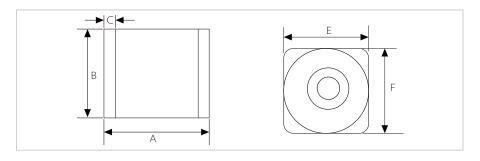


## **REFLOW PROFILE**

Reflow Condition		Lead-free assembly	
	Temperature Min	150°C	
Pre Heat	Temperature Max	200°C	
	Time(min to max)	60 – 180 secs	
Average ra	amp up rate (Liquidus) $Temp(T_L)$ to peak	3°C/second max	
	$T_s$ (max)to $T_L$ - Ramp-up Rate		
Reflow	Temperature (T <sub>L</sub> ) (Liquidus)	217℃	
Kellow	Time(min to max)( $t_s$ )	60 – 150 seconds	
Peak Temperature (T,)		260°C	
Time within 5°C of actual peak Temperature (tp)		10-30 seconds	
Ramp-down Rate Time 25°C to peak Temperature (T,) Do not exceed		6°C/second max	
		8 minutes max.	
		260°C	



# PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



Ref.	Outline Dimensions	
nei.	Millimeters	
А	5.0±0.3	
В	5.0±0.3	
С	0.5±0.1	
E	5.0±0.3	
F	5.0±0.3	

# **ORDERING INFORMATION**

Part Number	Size	Marking	QTY/Reel	Reel Size
SG2D05B090	5.0*5.0mm	<b>愛</b> SG090 <u>05</u>	1000PCS	13″



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### By QR Code





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