

### **FEATURES**

l	Surface I	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**

lcon	Solderability	
RoHS	Compliance with 2011/65/EU	
HF Compliance with IEC61249-2-21:2003		
₽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 ≤ 900	V
impuise Spark-over voltage	At 1kV/μs	Typical values of distribution ≤850	V
Impulse Discharge Current 2)	8/20µs	10,000	А
Insulation Resistance	DC=50V	≥1	GΩ
Capacitance at 1MHz	V <sub>DC</sub> =0.5V	≤ 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

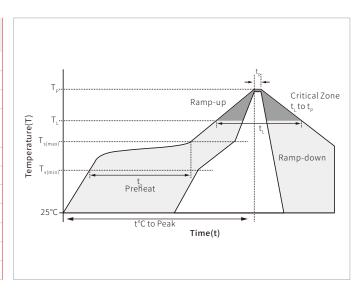
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

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

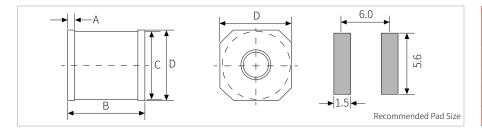


# **REFLOW PROFILE**

	Reflow Condition	Lead-free assembly	
	Temperature Min	150°C	
Pre Heat	Temperature Max	200°C	
	Time(min to max)	60 – 180 secs	
Average ramp up rate (Liquidus)Temp (T <sub>L</sub> ) to pea		3°C/second max	
	$T_s(max)$ to $T_L$ - Ramp-up Rate	5 c/second max	
Reflow	Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
Rellow	$Time(min to max)(t_s)$	60 – 150 seconds	
Peak Tem	nperature (T₅)	260°C	
Time with	in 5°C of actual peak Temperature (tp)	10-30 seconds	
Ramp-do	wn Rate	6°C/second max	
Time 25°	C to peak Temperature (T₅)	8 minutes max.	
Do not exceed		260°C	



# **DIMENSIONS AND RECOMMENDED SOLDERING PAD**



Ref.	Outline Dimensions	
itel.	Millimeters	
А	0.5±0.2	
В	6.0±0.2	
С	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	<b>%</b> SG090 <u>05</u>	1000PCS	13"



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### By QR Code





Website

Machat

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