

## **FEATURES**

| Surface Mounting Design 5.0\*5.0\*7.5mm

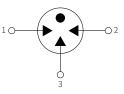
High Current Handling Capability 5,000A @ 8/20 μs

Low Capacitance and Insertion Loss

| Quick Response and Long Service Life

| Moisture sensitivity level:Level 1





## 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		
<i>1</i> <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	Symbol	Limit	Unit
DC Blocking Voltage 1)	100V/s	63-117	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	5,000	
Insulation Resistance	DC=50V	≥1	GΩ
Capacitance at 1MHz	Capacitance at 1MHz $V_{DC}$ =0.5V $\leq$ 1.5		pF
Operating And Storage Temperature		-40-125	°C

# **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		

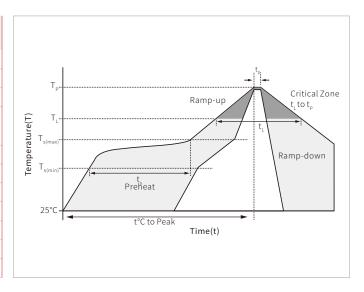
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

<sup>1)</sup> In ionized mode 2) Terms and waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21  $\,$ 

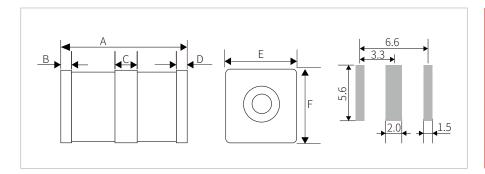


# **REFLOW PROFILE**

	Reflow Condition	Lead-free assembly	
	Temperature Min	150°C	
Pre Heat	Temperature Max	200°C	
	Time(min to max)	60 – 180 secs	
Average ra	mp up rate (Liquidus) $Temp(T_L)$ to peak	3°C/second max	
	$T_s(max)$ to $T_\iota$ - 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 Temperature (T <sub>P</sub> )		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 (T₅)		8 minutes max.	
Do not exceed		260°C	



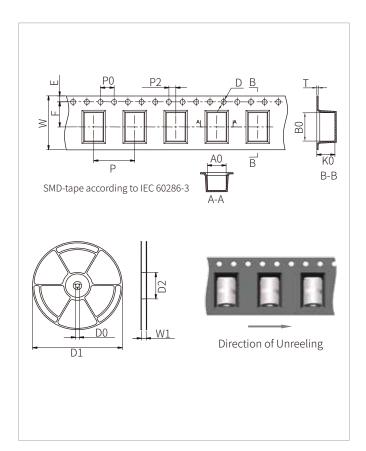
# **DIMENSIONS AND RECOMMENDED SOLDERING PAD**



Ref.	Outline Dimensions	
	Millimeters	
Α	7.5±0.3	
В	0.5±0.2	
С	1.6±0.2	
D	0.5±0.2	
E	5.0±0.2	
F	5.0±0.2	



# TAPE AND REEL SPECIFICATION



Ref.	Dimensions		
Kei.	Millimeters	Inches	
W	16±0.3	0.630±0.012	
A0	5.4±0.1	0.213±0.004	
В0	8.4±0.1	0.331±0.004	
K0	5.3±0.1	0.209±0.004	
Р	12±0.1	0.472±0.004	
F	7.5±0.1 0.295±0.004		
E	1.75±0.1 0.069±0.004		
D	1.5+0.1/-0.0 0.059+0.004/-0.		
P0	4±0.1 0.157±0.004		
P2	2±0.1	0.079±0.004	
Т	0.4±0.1	0.016±0.004	
D0	13.3±0.15 0.524±0.006		
D1	330±2 12.992±0.079		
D2	100+1/-2 3.937+0.039/-0.079		
W1	16.5±0.4 0.65±0.016		

# **ORDERING INFORMATION**

Part Number	Size	Marking	QTY/Reel	Reel Size
SG3D05B090	5.0*5.0*7.5mm	SG3D05B090	1000PCS	13"



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### By QR Code





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