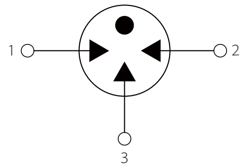
FEATURES

5.0*5.0*7.5mm



Schematic Symbol

- 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

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
UL	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	184-276	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values ≤ 900	V
	At 1kV/μs	Typical values of distribution ≤850	V
Impulse Discharge Current 2)	8/20μs	5,000	A
Insulation Resistance	DC=100V	≥ 1	GΩ
Capacitance at 1MHz	V_{DC}=0.5V	≤ 1.5	pF
Operating And Storage Temperature		-40-125	℃

1) In ionized mode
2) Terms and waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21

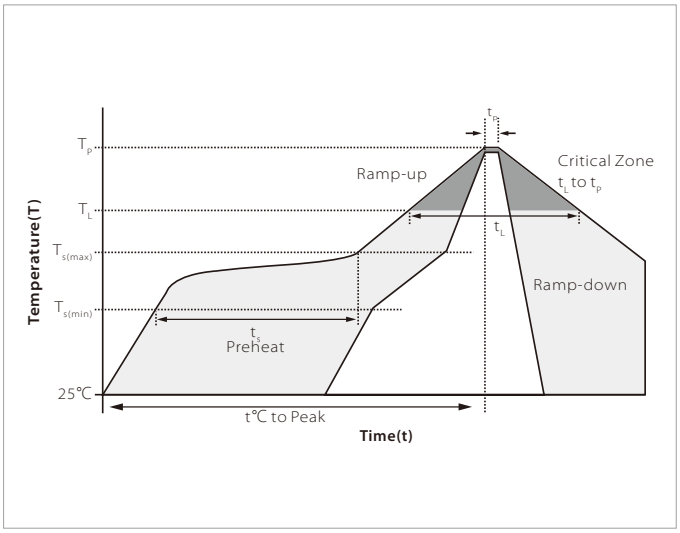
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

Testing items	Technical standards
High Temperature Storage Test	Temperature: 85℃ ; Time:2H
Low Temperature Storage Test	Temperature: -40℃ ; Time:2H
Vibration	Frequency: 10-500Hz ; Amplitude：0.15mm ; Time:45min
Resistance of soldering heat	Temperature: 260±5℃; Time of dip soldering：10s，1time

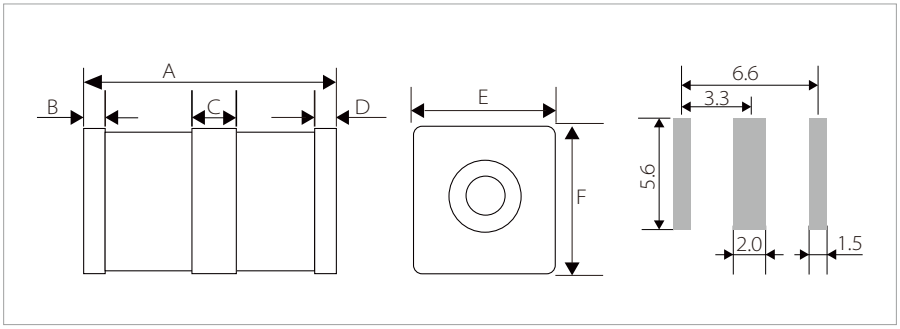
NOTE: Up-screen program can be specified by customer's request via contacting Semiware service

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℃
	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

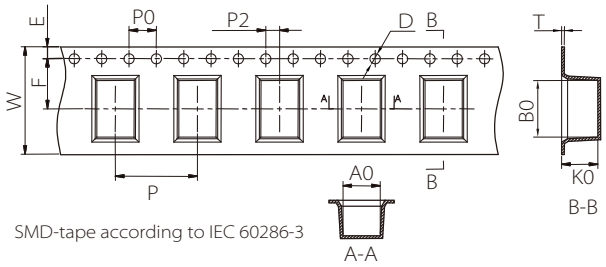


PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD

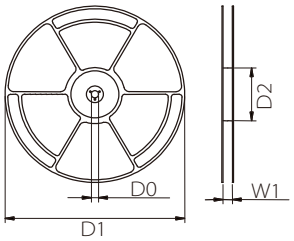


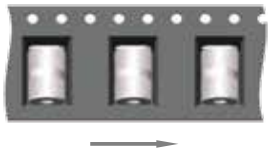
Ref.	Outline Dimensions
	Millimeters
A	7.5±0.3
B	0.5±0.2
C	1.6±0.2
D	0.5±0.2
E	5.0±0.2
F	5.0±0.2

TAPE AND REEL SPECIFICATION



SMD-tape according to IEC 60286-3





Direction of Unreeling

Ref.	Dimensions	
	Millimeters	Inches
W	16±0.3	0.630±0.012
A0	5.4±0.1	0.213±0.004
B0	8.4±0.1	0.331±0.004
K0	5.3±0.1	0.209±0.004
P	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/-0.0
P0	4±0.1	0.157±0.004
P2	2±0.1	0.079±0.004
T	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
SG3D05B230	5.0*5.0*7.5mm	SG3D05B230	1000PCS	13"

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