

FEATURES

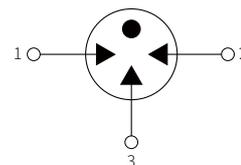
- | Size Design 5.0*5.0*7.5mm
- | High Current Handling Capability 10000A @ 8/20 μ s
- | Low Capacitance and Insertion Loss
- | Quick Response and Long Service Life
- | Moisture sensitivity level: Level 1



5.0*5.0*7.5mm

APPLICATION INFORMATION

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



Schematic Symbol

AGENCY APPROVALS

| Icon | Solderability |
|---|------------------------------------|
| RoHS | Compliance with 2011/65/EU |
| HF | Compliance with IEC61249-2-21:2003 |
|  | Mean lead free |
|  | 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 | Rating | Unit |
|-----------------------------------|-----------------------|---|--------------|
| DC Blocking Voltage 1) | 100V/s | 184-276 | V |
| Impulse Spark-over Voltage | At 1kV/ μ s | for 99 % of measured values \leq 700 | V |
| | At 1kV/ μ s | Typical values of distribution \leq 600 | V |
| Impulse Discharge Current 2) | 8/20 μ s | 10 | KA |
| Insulation Resistance | DC=100V | \geq 1 | G Ω |
| Capacitance at 1MHz | V _{DC} =0.5V | \leq 1 | pF |
| Operating and Storage Temperature | | -40~90 | $^{\circ}$ C |

1) In ionized mode

2) Terms and waveforms in accordance with ITU-T Rec. K. 12; IIEC 61643-311

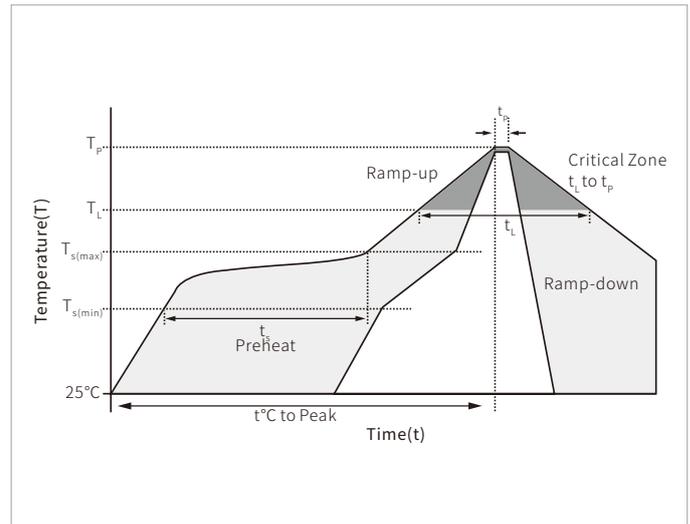
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

| Testing items | Technical standards |
|-------------------------------|--|
| High Temperature Storage Test | Temperature: 85 $^{\circ}$ C ; Time:2H |
| Low Temperature Storage Test | Temperature: -40 $^{\circ}$ C ; Time:2H |
| Vibration | Frequency: 10-500Hz ; Amplitude:0.15mm ; Time:45min |
| Resistance of soldering heat | Temperature: 260 $^{\circ}$ C; Time of dip soldering:10s,1time |

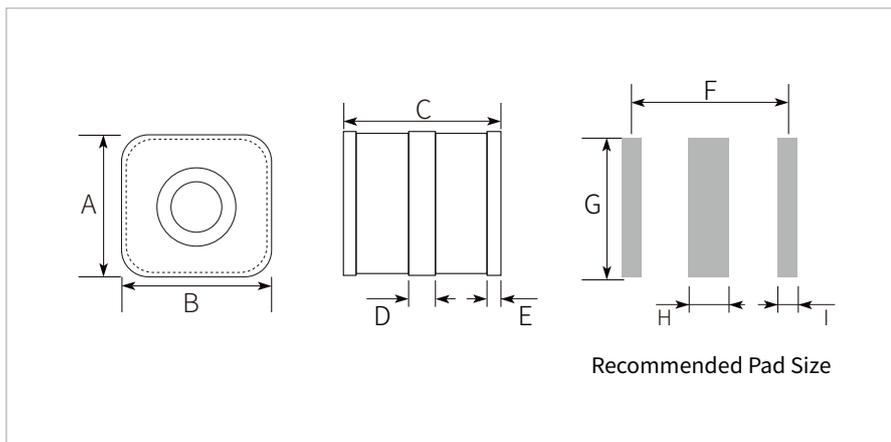
NOTE:Up-screen program can be specified by customer' s request via contacting Semiware service

REFLOW PROFILE

| Reflow Condition | | Lead-free assembly |
|---|----------------------------------|--------------------|
| 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 $T_s(\max)$ to T_L - Ramp-up Rate | | 3°C/second max |
| Reflow | Temperature (T_L) (Liquidus) | 217°C |
| | Time(min to max)(t_s) | 60~150 seconds |
| Peak Temperature (T_p) | | 260 °C |
| Time within 5°C of actual peak Temperature (t_p) | | 20~40 seconds |
| Ramp-down Rate | | 6°C/second max |
| Time 25°C to peak Temperature (T_p) | | 8 minutes max. |
| Do not exceed | | 260°C |

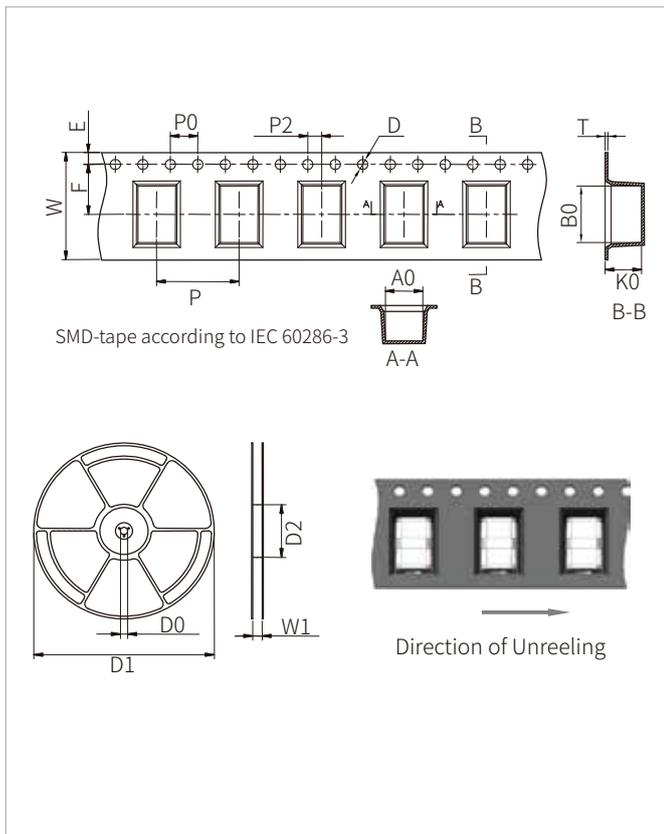


PRODUCT DIMENSIONS



| Ref. | Outline Dimensions |
|------|--------------------|
| | Millimeters |
| A | 5.0±0.2 |
| B | 5.0±0.2 |
| C | 7.5±0.3 |
| D | 1.5±0.3 |
| E | 0.5±0.2 |
| F | 6.4 |
| G | 5.5 |
| H | 2.8 |
| I | 1.6 |

TAPE AND REEL SPECIFICATION



| 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 | QTY/Reel | Reel Size |
|-------------|---------------|----------|-----------|
| SG3D05B230B | 5.0*5.0*7.5mm | 1000PCS | 13" |

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code

Website



Wechat

To find your local partner within Semiware' s global website: www.semiware.com

© 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.