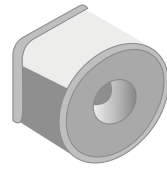
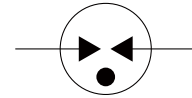


## FEATURES

- | Surface Mounting Design 5.4\*5.4\*4.0mm
- | High Current Handling Capability 5000A @ 8/20  $\mu$ s
- | Low Capacitance and Insertion Loss
- | Quick Response and Long Service Life
- | Moisture sensitivity level: Level 1



5.4\*5.4\*4.0mm





Schematic Symbol

## 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 |
|  | 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                         | Condition           | Rating                                    | Unit         |
|-----------------------------------|---------------------|---|--------------|
| DC Spark-over Voltage 1)          | 100V/s              | 53-97                                     | V            |
| Impulse Spark-over Voltage        | At 1kV/ $\mu$ s     | for 99 % of measured values $\leq$ 650    |              |
|                                   | At 1kV/ $\mu$ s     | Typical values of distribution $\leq$ 600 |              |
| Discharge Current (8/20us 2)      | 10 times            | 5   | KA           |
| AC Discharge Current              | 50Hz, 1S            | 5   | A            |
| Minimum Insulation Resistance     | Test Voltage DC=25V | 1   | G $\Omega$   |
| Max. Capacitance 1MHz             | VDC=0.5V            | 1   | pF           |
| Operating and Storage Temperature |                     | -40~125                                   | $^{\circ}$ C |

1) In ionized mode

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

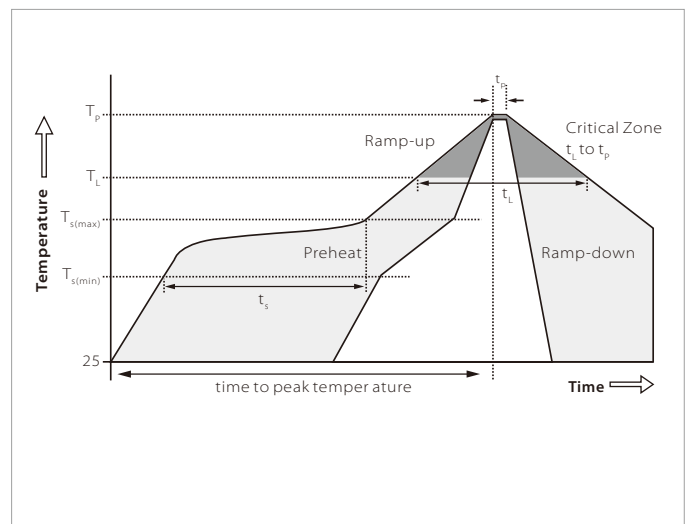
## ENVIRONMENTAL RELIABILITY CHARACTERISTICS

| Testing items                 | Technical standards  |
|-------------------------------|--|
| High Temperature Storage Test | Temperature: 85 $^{\circ}$ 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 $\pm$ 5 $^{\circ}$ C; Time of dip soldering: 10s, 1time |

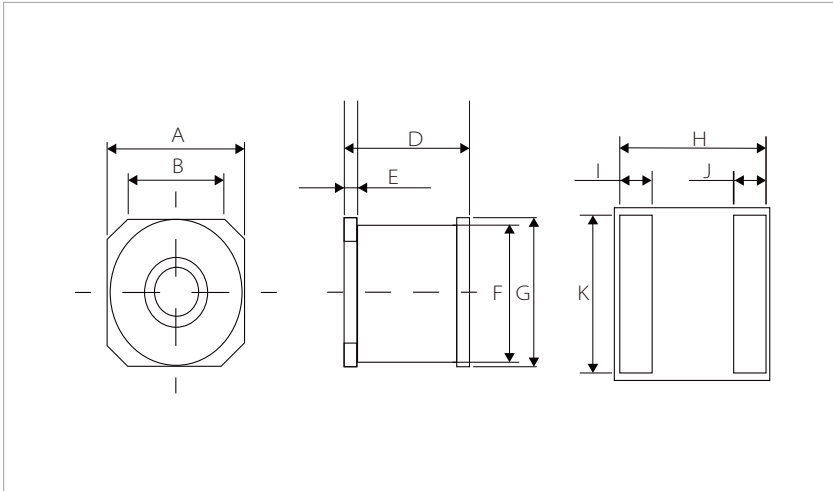
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

## REFLOW PROFILE

| Reflow Condition   |                                  | Pb-Free assembly          |
|--|----------------------------------|---------------------------|
| Pre Heat   | Temperature Min                  | 150 $^{\circ}$ C          |
|  | Temperature Max                  | 200 $^{\circ}$ 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 $^{\circ}$ C/second max |
| Reflow   | Temperature ( $T_L$ ) (Liquidus) | 217 $^{\circ}$ C          |
|  | Temperature ( $T_L$ )            | 60-150 seconds            |
| Peak Temperature ( $T_p$ )   |                                  | 245~260 $^{\circ}$ C      |
| Time within 5 $^{\circ}$ C of actual peak Temperature ( $t_p$ )                          |                                  | 30 seconds                |
| Ramp-down Rate   |                                  | 6 $^{\circ}$ C/second max |
| Time 25 $^{\circ}$ C to peak Temperature ( $T_p$ )                                       |                                  | 8 minutes max.            |
| Do not exceed  |                                  | 260 $^{\circ}$ C          |

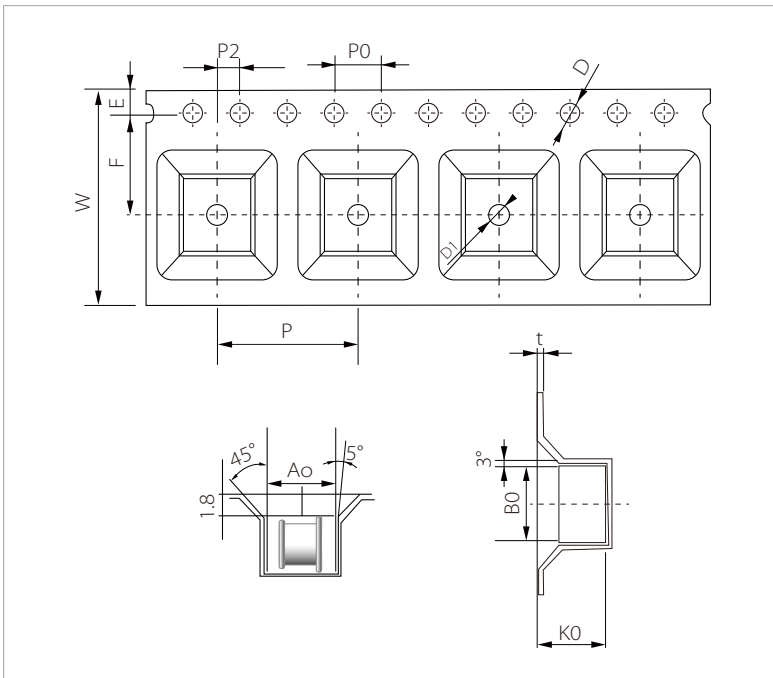


## PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD




| Ref. | mm        |
|------|-----------|
| A    | 5.4±0.15  |
| B    | 3.8       |
| C    | Φ6.6±0.2  |
| D    | 4.0±0.2   |
| E    | 0.5±0.1   |
| F    | Φ4.7±0.2  |
| G    | Φ5.4±0.15 |
| H    | 4.7       |
| I    | 1.3       |
| J    | 1.3       |
| K    | 3.9       |

## PACKAGE REEL INFORMATION



| Ref. | mm       |
|------|----------|
| W    | 16.0±0.3 |
| P    | 12.0±0.1 |
| E    | 1.75±0.1 |
| F    | 7.5±0.1  |
| P2   | 2.0±0.1  |
| D    | 1.5±0.1  |
| D1   | 1.5±0.1  |
| P0   | 4.0±0.1  |
| 10P0 | 40.0±0.2 |
| A0   | 5.7±0.1  |
| B0   | 5.7±0.1  |
| K0   | 5.7±0.1  |
| t    | 0.4±0.05 |

## ORDERING INFORMATION

| Part Number | Size          | Marking  | QTY/Reel | Reel Size |
|-------------|---------------|--|----------|-----------|
| SG2R05B075B | 5.4*5.4*4.0mm |  SG075 05 | 800      | 13"       |

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**Customer Service**

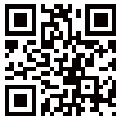
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Website



Wechat

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