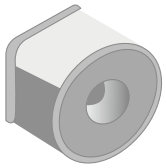
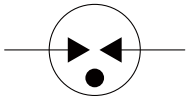
# FEATURES

- Surface Mounting Design 8.3*8.3*6.0mm
- High Current Handling Capability 20000A @ 8/20 μs
- Low Capacitance and Insertion Loss
- Quick Response and Long Service Life
- Moisture sensitivity level：Level 1



8.3*8.3*6.0mm



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 |
| Pb | Mean lead free |
| c UL us | 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 | 60-90 | V |
| Impulse Spark-over Voltage | At 1kV/μs | for 99 % of measured values ≤600 | |
| | At 1kV/μs | Typical values of distribution ≤550 | |
| Discharge Current (8/20us) 2) | 10 times | 20 | KA |
| AC Discharge Current | 50Hz, 1S | 20 | A |
| Minimum Insulation Resistance | Test Voltage DC=25V | 1 | GΩ |
| Max. Capacitance 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

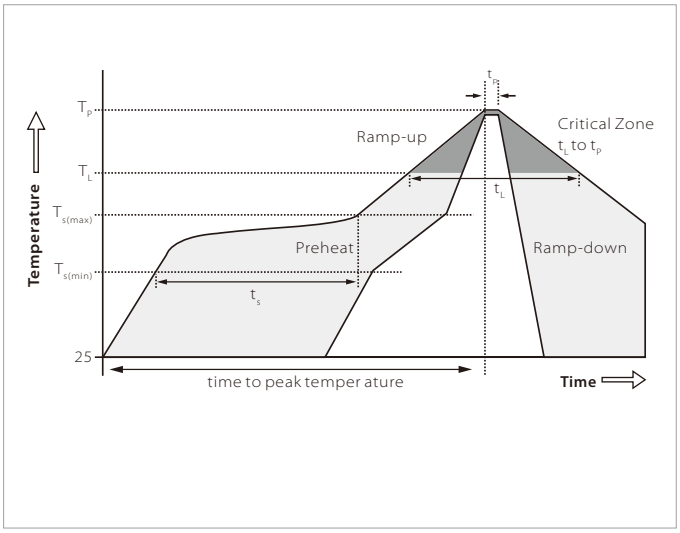
# ENVIRONMENTAL RELIABILITY CHARACTERISTICS

| 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 |

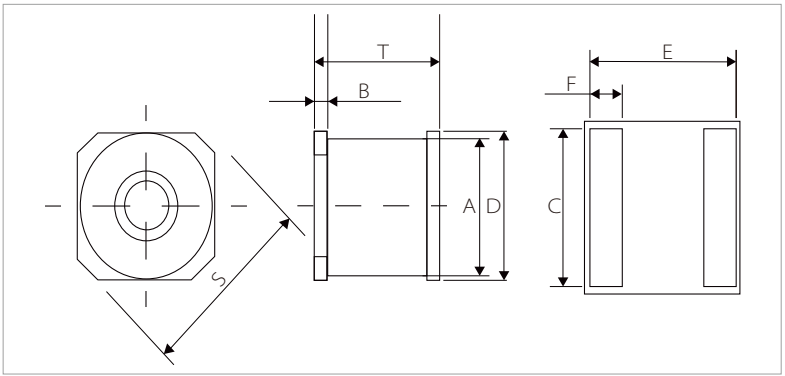
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

# 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℃ |
| | Temperature ($T_L$) | 60-150 seconds |
| Peak Temperature ($T_p$) | | 260+0/-5 °C |
| Time within 5°C of actual peak Temperature (tp) | | ~10 seconds |
| Ramp-down Rate | | 6°C/second max |
| Time 25°C to peak Temperature ($T_p$) | | 8 minutes max. |
| Do not exceed | | 260°C |

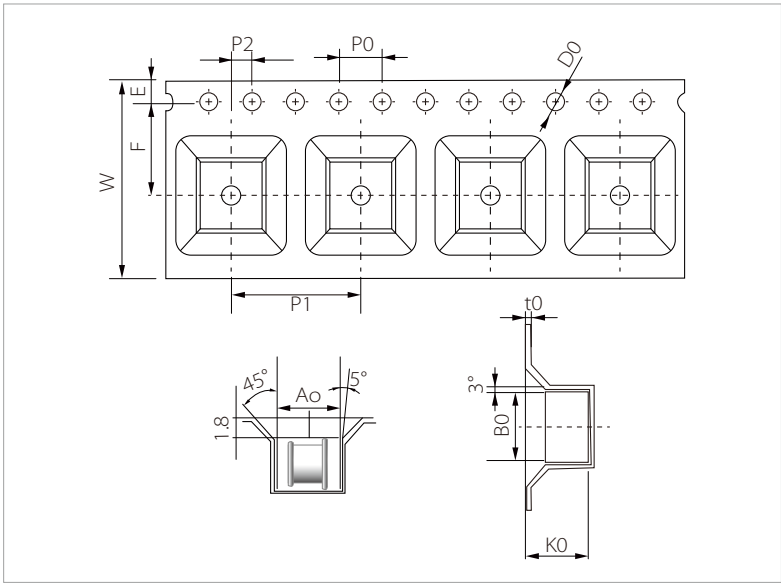


# DIMENSIONS AND RECOMMENDED SOLDERING PAD




| Ref. | mm |
|---|---|
| A | 8.0±0.2 |
| B | 0.5±0.1 |
| C | 9.0 |
| D | 8.3±0.2 |
| E | 6.7 |
| F | 1.2 |
| T | 6.0±0.25 |
| S | 9.0±0.4 |

# PACKAGE REEL INFORMATION




| Ref. | mm |
|---|---|
| W | 16.0±0.3 |
| P0 | 4.0±0.1 |
| P1 | 12.0±0.1 |
| P2 | 2.0±0.1 |
| D0 | 1.55±0.05 |
| E | 1.75±0.1 |
| F | 7.5±0.1 |
| A0 | 6.35±0.1 |
| K0 | 6.55±0.1 |
| B0 | 8.65±0.1 |
| t0 | 0.5±0.1 |

# ORDERING INFORMATION

| Part Number | Size | Marking | QTY/Reel | Reel Size |
|---|---|---|---|---|
| SG2R08B075A | 8.3*8.3*6.0mm | SG075 08 | 600 | 13" |

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