

## **FEATURES**

Surface Mounting Design 3.2\*1.6\*1.6mm

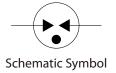
High Current Handling Capability 500A @ 8/20 µs

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**

| lcon      | Solderability                      |  |
|-----------|------------------------------------|--|
| RoHS      | Compliance with 2011/65/EU         |  |
| HF        | Compliance with IEC61249-2-21:2003 |  |
| <b>P6</b> | Mean lead free                     |  |
| <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                         | Condition                                | Rating                                | Unit |
|-----------------------------------|--|---------------------------------------|------|
| DC Blocking Voltage 1)            | 100V/s                                   | 280-520                               |      |
| Impulse Spark-over Voltage        | At 1kV/μs                                | for 99 % of measured values ≤ 1050    | V    |
| impuise Spark-over voltage        | At 1kV/μs                                | Typical values of distribution ≤ 1000 | V    |
| Impulse Discharge Current 2)      | 8/20µs                                   | 500                                   | Α    |
| Insulation Resistance             | DC=100V                                  | ≥ 1                                   | GΩ   |
| Capacitance at 1MHz               | ance at 1MHz V <sub>DC</sub> =0.5V ≤ 0.6 |                                       | рF   |
| Operating And Storage Temperature |  | -40-125                               | °C   |

<sup>1)</sup> In ionized mode

# **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°C;Time of dip soldering :10s,1time   |

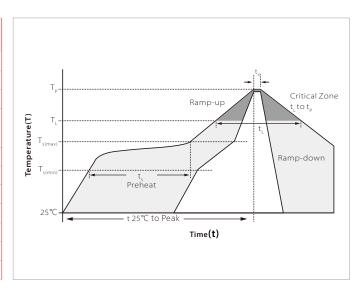
**NOTE:** Up-screen program can be specified by customer's request via contacting Semiware service

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

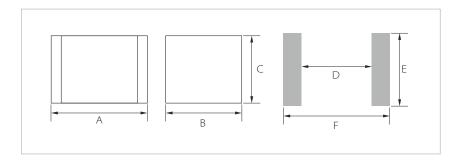


## **REFLOW PROFILE**

|  | Reflow Condition                           | Lead-free assembly |  |
|--|--|--------------------|--|
|  | Temperature Min                            | 150°C              |  |
| Pre Heat   | Temperature Max                            | 200°C              |  |
|  | Time(min to max)                           | 60 – 180 secs      |  |
| Average ra   | amp up rate (Liquidus)Temp $(T_L)$ to peak | 3°C/second max     |  |
|  | $T_s(max)$ to $T_L$ - Ramp-up Rate         |                    |  |
| Reflow   | Temperature (T <sub>L</sub> ) (Liquidus)   | 217°C              |  |
| Kellow   | Time (min to max) $(t_L)$                  | 60 – 150 seconds   |  |
| PeakTem  | perature (T,)                              | 260°C              |  |
| Time within 5°C of actual peak Temperature (tp)                                |  | 10 – 30 seconds    |  |
| Ramp-down Rate  Time 25°C to peak Temperature (T <sub>p</sub> )  Do not exceed |  | 6°C/second max     |  |
|  |  | 8 minutes max.     |  |
|  |  | 260°C              |  |



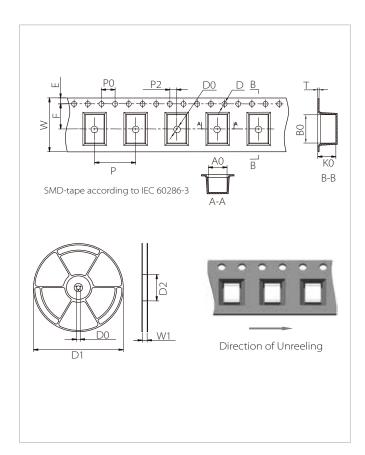
# PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



| Ref. | mm                 |  |
|------|--------------------|--|
| А    | 3.2±0.3mm          |  |
| В    | 1.6±0.3mm          |  |
| С    | 1.6±0.3mm<br>2.0mm |  |
| D    |                    |  |
| Е    | 1.8mm              |  |
| F    | 4.0mm              |  |



## **TAPE AND REEL SPECIFICATION**



| Ref. | Dimensions   |                    |  |
|------|--------------|--------------------|--|
| nei. | Millimeters  | Inches             |  |
| W    | 12±0.3       | 0.472±0.012        |  |
| A0   | 2.8±0.1      | 0.110±0.004        |  |
| ВО   | 3.5±0.1      | 0.138±0.004        |  |
| KO   | 2.8±0.1      | 0.110±0.004        |  |
| Р    | 8.0±0.1      | 0.315±0.004        |  |
| F    | 5.5±0.1      | 0.217±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        |  |
| Т    | 0.35±0.05    | 0.014±0.002        |  |
| 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   | 12.5±0.4     | 0.492±0.016        |  |

# **ORDERING INFORMATION**

| Part Number | Size          | QTY/Reel | Reel Size |
|-------------|---------------|----------|-----------|
| SG3216B400  | 3.2*1.6*1.6mm | 3000PCS  | 13"       |



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### By QR Code





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