

| Moisture sensitivity level: Level 1

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



8.3*8.3*6.0mm



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 | |
| % | Mean lead free | |
| <i>IR</i> 。 | 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 | 120-180 | V |
| Impulse Spark-over Voltage | At 1kV/μs | for 99 % of measured values ≤ 500 | V |
| impuise spark-over voltage | At 1kV/μs | Typical values of distribution ≤ 450 | V |
| Impulse Discharge Current 2) | 8/20µs | 20000 | А |
| AC Discharge Current | 50Hz, 1S, 10times | 20 | А |
| Insulation Resistance | DC=50V | ≥ 1 | GΩ |
| Capacitance at 1MHz | V _{DC} =0.3V | ≤ 1.5 | pF |
| Operating and Storage Temperature | | -40-125 | °C |

¹⁾ In ionized mode

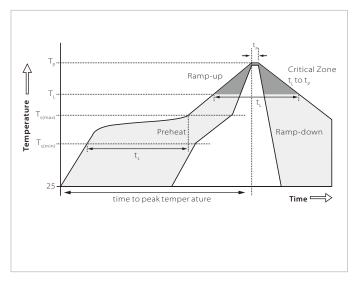
ENVIRONMENTAL RELIABILITY CHARACTERISTICS

| 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±5°C; Time of dip soldering: 10s, 1time |

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

REFLOW PROFILE

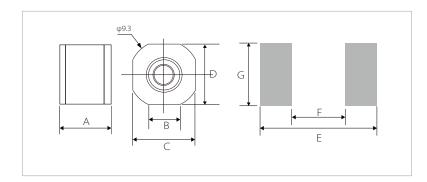
| Reflow Condition | | Lead-free assembly |
|--|--|--------------------|
| | Temperature Min | 150°C |
| Pre Heat | Temperature Max | 200°C |
| | Time(min to max) | 60-180 secs |
| Average ramp up rate (Liquidus)Temp (T_L) to peak T_s (max)to T_L - Ramp-up Rate | | 3°C/second max |
| D - fl | Temperature (T _L) (Liquidus) | 217°C |
| Reflow Temperature (T ₁) | | 60-150 seconds |
| PeakTem | perature (T,) | 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,) | | 8 minutes max. |
| Do not exceed | | 260°C |



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

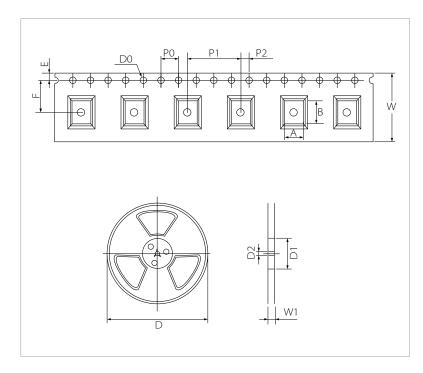


PRODUCT DIMENSIONS AND RECOMMENDED SOLDERING PAD



| Ref. | mm | |
|------|---------|--|
| А | 6.0±0.2 | |
| В | 4.2±0.1 | |
| С | 8.3±0.2 | |
| D | 8.3±0.2 | |
| Е | 7.0 | |
| F | 4.0 | |
| G | 8.0 | |

PACKAGE REEL INFORMATION



| Ref. | mm | inch |
|------|-----------|---------------|
| А | 6.5±0.1 | 0.256±0.004 |
| В | 8.4±0.1 | 0.331±0.004 |
| D0 | Ф 1.5±0.1 | Φ 0.059±0.004 |
| PO | 4.0±0.1 | 0.157±0.004 |
| P1 | 12.0±0.1 | 0.472±0.004 |
| P2 | 2.0±0.1 | 0.079±0.004 |
| E | 1.75±0.1 | 0.069±0.004 |
| F | 7.5±0.1 | 0.295±0.004 |
| W | 16.5±0.4 | 0.650±0.016 |
| D | Ф 330.0 | Ф 13.0 |
| D1 | Ф 50Min | Ф 1.97Min |
| D2 | Ф 13±0.15 | 0.512±0.006 |
| W1 | 16.8±2.0 | 0.661±0.079 |

ORDERING INFORMATION

| Part Number | Size | QTY/Reel | Reel Size |
|-------------|---------------|----------|-----------|
| SG2R09B150 | 8.3*8.3*6.0mm | 600pcs | 13″ |



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By QR Code





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