

FEATURES

| Surface Mounting Design 5.5*5.5*6.0mm

High Current Handling Capability 10,000A @ 8/20 μs

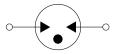
Low Capacitance and Insertion Loss

| Quick Response and Long Service Life

| Moisture sensitivity level:Level 1



5.5*5.5*6.0mm



Schematic Symbol

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 | |
| Pb | Mean lead free | |

PRODUCT CHARACTERISTICS

| Lead Material | Body Material | Terminal Finish |
|-----------------------|---------------|-----------------------|
| Copper or Fe-Ni alloy | Ceramics | 100% Matte-Tin Plated |



ELECTRICAL PARAMETER

| Parameter | Symbol | Limit | Unit |
|-----------------------------------|-----------------------|-------------------------------------|------|
| DC Blocking Voltage 1) | 100V/s | 72-108 | V |
| Impulse Spark-over Voltage | At 1kV/μs | for 99 % of measured values ≤ 900 | V |
| impuise Spair-over voltage | At 1kV/μs | Typical values of distribution ≤850 | V |
| Impulse Discharge Current 2) | 8/20µs | 10,000 | А |
| Insulation Resistance | DC=50V | ≥1 | GΩ |
| Capacitance at 1MHz | V _{DC} =0.5V | ≤ 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 | |

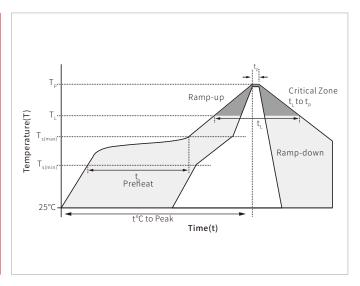
NOTE: Up-screen program can be specified by customer's request via contacting Semiware service

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

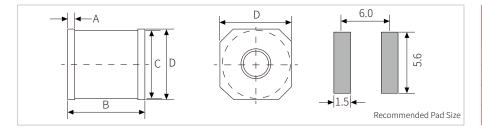


REFLOW PROFILE

| Reflow Condition | | Lead-free assembly | |
|--|--|--------------------|--|
| | Temperature Min | 150°C | |
| Pre Heat | Temperature Max | 200°C | |
| | Time(min to max) | 60 – 180 secs | |
| Average ramp up rate (Liquidus) Temp (T_L) to peak | | 3°C/second max | |
| T₅(max)to T₁ - Ramp-up Rate | | | |
| Reflow | Temperature (T _L) (Liquidus) | 217°C | |
| Kellow | Time(min to max)(t _s) | 60 – 150 seconds | |
| Peak Temperature (T,) | | 260 °C | |
| Time within 5°C of actual peak Temperature (tp) | | 10-30 seconds | |
| Ramp-down Rate | | 6°C/second max | |
| Time 25°C to peak Temperature (T,) | | 8 minutes max. | |
| Do not exceed | | 260°C | |



DIMENSIONS AND RECOMMENDED SOLDERING PAD



| Ref. | Outline Dimensions | |
|------|--------------------|--|
| | Millimeters | |
| А | 0.5±0.2 | |
| В | 6.0±0.2 | |
| С | 5.4±0.2 | |
| D | 5.5±0.2 | |

ORDERING INFORMATION

| Part Number | Size | Marking | QTY/Reel | Reel Size |
|-------------|---------------|--------------------------|----------|-----------|
| SG2R05B090C | 5.5*5.5*6.0mm | % SG090 <u>05</u> | 1000PCS | 13" |



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By QR Code





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