

SPECIFICATION SHEET

SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

| SPECIFICATION SHEET NO. | S0407 - SXF1268RDNSS30 | | | | | |
|-------------------------|---|--|--|--|--|--|
| ORIGINAL MFG/PART NO. | Shengxin SAW/SXF1268RDNSS02/SXF1213 | | | | | |
| NEXTGEN PART CODE | SXF1268RDNSS30 Indicate This Code For RFQ Order | | | | | |
| DATE | Apr. 7, 2025 | | | | | |
| REVISION | A3 Updated With Most Recent Data | | | | | |
| DESCRIPTION AND | SMD SAW Filter, 6 Pads, 3030 Type, SXF Series | | | | | |
| MAIN PARBMETRICS | Case code DCC6C, Case Dimension L3.0*W3.0*H1.50mm Center Frequency 1268.52MHz; Insertion Loss: 3.0dB Typical, 4.0dB Max. Bandwidth @-3dB: 30MHz Max. Operating Temp. Range -45°C ~ +85°C Reflow Profile Condition 260°C Max. Package in Tape/Reel, 1000pcs/Reel REACH/RoHS/RoHS III Compliant | | | | | |
| CUSTOMER | | | | | | |
| CUSTOMER PART NUMBER | | | | | | |
| CROSS REF. PART NUMBER | | | | | | |
| МЕМО | | | | | | |

VENDOR APPROVE

Issued/Checked/Approved







Effective Date: Apr. 7, 2025

| CUSTOMER APPROVE | |
|------------------|--|
| | |
| | |
| | |
| Date: | |

4/7/2025

NextGen Components, Inc.
sales@NextGenComponent.com



SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

MAIN FEATURE

- SMD SAW Filter 3030 Type 6 Pads
- Dimension L3.0*W3.0*H1.5mm, Case code DCC6C
- Low-loss SAW filter
- Low Amplitude Ripple
- No Matching Network Required For Operation At 50Ω
- Ceramic Package For Surface Mounted Technology (SMT)
- Electrostatic Sensitive Device (ESD)
- Moisture Sensitivity Level (MSL) 1
- Short Lead time
- · Cross Competitors Parts and More
- REACH/RoHs/RoHs III Compliant





Image shown is a representation only. Exact specifications should be obtained from the product dimension.





APPLICATION

- Bluetooth, Wireless Communication Set
- Communication Electronics
- · GPS, Remote Control Application

ELECTRICAL CHARBCTERISTICS

- See Page 5
- All Products Parameters are Subject To NextGen Components' Final Confirmation.



SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

HOW TO ORDER

• Please Follow Up Part Code Guide And Indicate NextGen Part Code <u>SXF1268RDNSS30</u> For RFQ and Order.

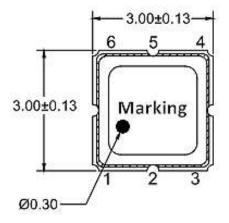
PART CODE GUIDE



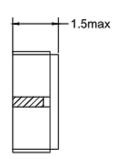
| CODE | NAME | KEY SPECIFICATION OPTION |
|-------|--------------------------------|---|
| SXF | Series Code | SMD SAW Filter |
| 1268R | Frequency Range Code | 1268R: 1268.52MHz or Custom Frequency Range |
| DNS | Internal Control Code | Letter A~Z, a~z or Digits (1-9) |
| S30 | Dimension Code | S30: Case Dimension L3.0*W3.0*H1.5mm, 6 Pads, 3030 Type |
| хх | Special/Custom Parameters Code | Blank: N/A XX: Letter A~Z, a~z or Digits (0~9) for Special/Custom Parameters |

DIMENSION - Unit: mm, L3.0*W3.0*H1.5mm

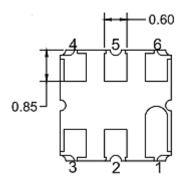
Top View



Side View



Bottom View



| PIN CONFIGURATION | | | | | |
|-------------------|--------------|--|--|--|--|
| 2 | Input | | | | |
| 5 | Output | | | | |
| 1,3,4,6 | To Be Ground | | | | |

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MAX. RATING & CHARACTERISTICS - At 25±2°C Ambient Temperature Unless Otherwise Specified.

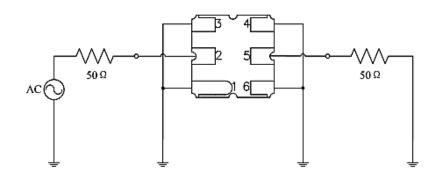
| PARAMETER | SYMBOLS | VALUE | UNITS |
|-----------------------------|---------|------------|-------|
| RF Power Level | Р | 15 | dBm |
| DC Voltage | VDC | 5 | V |
| Operating Temperature Range | Та | -45 to +85 | °C |
| Storage Temperature Range | Tstg | -45 to +85 | °C |
| ESD Voltage (MM) | Vмм | 50 | V |
| ESD Voltage (HBM) | Vнвм | 175 | V |

ELECTRONICAL CHARACTERISTICS - At 25±2°C Ambient Temperature Unless Otherwise Specified.

| PARAMETER | FREQUENCY | CHARACTERISTICS | | | | | |
|----------------------|-------------|-----------------|---------|-------|------|--|--|
| | RANGE (MHz) | MIN. | TYPICAL | MAX. | UNIT | | |
| Center Frequency | - | - | 1268.52 | - | MHz | | |
| Insertion Loss | Fc | - | 3.0 | 4.0 | dB | | |
| Bandwidth @-1dB | - | 20 | 20.5 - | | MHz | | |
| Bandwidth @-3dB | - | - | 24.5 | 30 | MHz | | |
| Bandwidth @-40dB | - | - | 47 | - MHz | | | |
| Absolute Attenuation | 1178.52 | 45 | 50 | - | dB | | |
| | 1238.52 | 40 | 45 | - | dB | | |
| | 1298.52 | 40 | 45 | - | dB | | |
| | 1358.52 | 50 | 55 | - | dB | | |

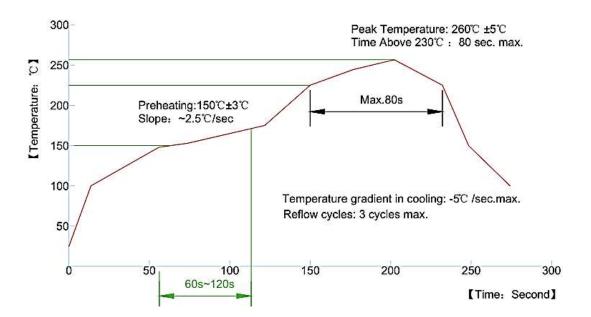


MEASUREMENT CIRCUIT – FOR REFERENCE ONLY



| PIN CONFIGURATION | | | | | | |
|-------------------|--------------|--|--|--|--|--|
| 2 | Input | | | | | |
| 5 | Output | | | | | |
| 1,3,4,6 | To Be Ground | | | | | |

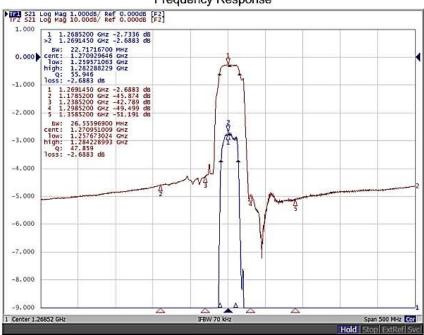
RECOMMENDED SOLDERING PROFILE – FOE REFERENCE ONLY



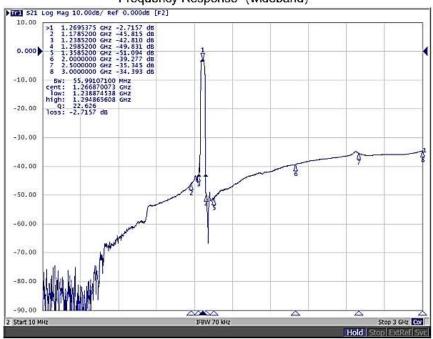
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FREQUENCY CHARACTERISTICS – FOR REFERENCE ONLY





Frequency Response (wideband)



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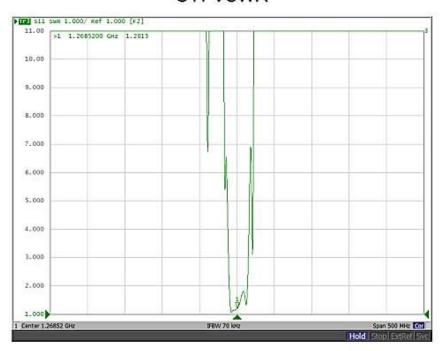
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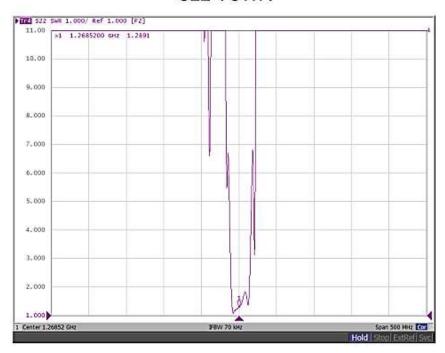
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FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY

S11 VSWR



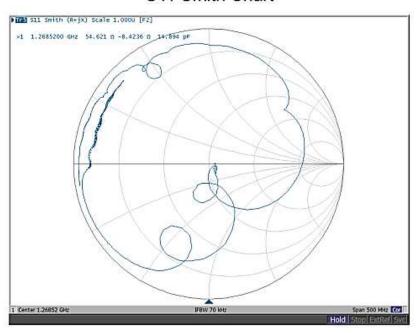
S22 VSWR



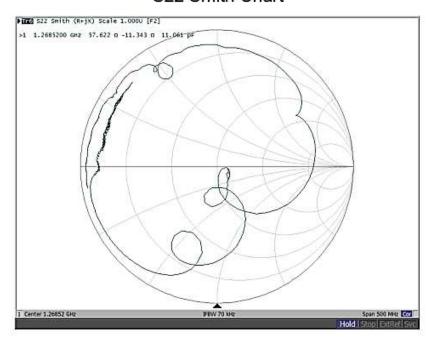


FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY

S11 Smith Chart



S22 Smith Chart





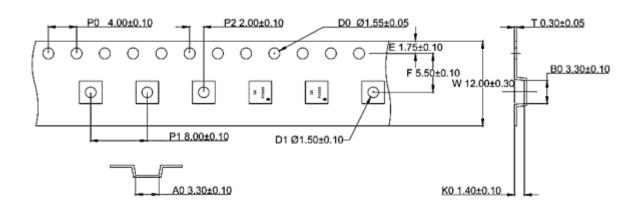
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RELIABILITY CHARACTERISTICS

| TEST ITEMS | TEST METHOD AND CONDITIONS |
|--|---|
| High Temperature Storage | Test temperature: +85°C±3°C Duration time: 500 hours Restore time: 2 hours at the room temperature (25°C) |
| Low Temperature Storage | Test temperature: -40°C±3°C Duration time: 500 hours Restore time: 2 hours at the room temperature (25°C) |
| High Temperature High Humidity Storage | Test temperature: +85°C±3°C Test Humidity: 85%±3% Duration Hours: 240 hours Restore time: 2 hours at the room temperature (25°C) |
| Temperature Cycling | Test Temperature: -40° _₋₁₀°C~+85⁺¹⁰0°C Time for each step: ≥30min Conversion time: ≤1min Cycle times: 100 times Restore time: 24 hours at the room temperature (25°C) |
| Soldering Heat Resistance | Reflow with 260±5°C, 10±1s (Solder Pot) Restore time: 2 hours at the room temperature (25°C) |
| Solderability Test | Soldering method and temperature: lead-free reflow soldering, 245±5 °C for 5±0.5s |
| Remarks | Please be certain not to apply voltage above the rated voltage of SAW components. Please be sure that the component operate within the specified operating temperature range. Abrupt temperature change shall be avoided because deterioration of the component characteristics can occur under that situation. Please be careful of soldering temperature when soldering. Please do not place soldering iron on the body of components. Please be careful not to subject the terminals or leads of components to excessive force. |

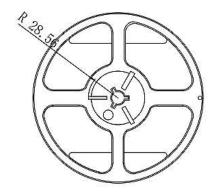


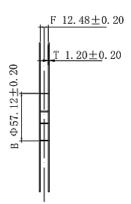
TAPE DIMENSION - Unit: mm, All Devices are packed in accordance with EIA standard RS-481-2.

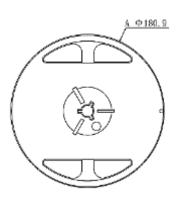


| Size | P0 | P1 | P2 | D0 | D1 | E | F | W | A0 | во | КО | Т |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|
| Value | 4.00 | 8.00 | 2.00 | Ф1.55 | Ф1.5 | 1.75 | 5.50 | 12.0 | 3.30 | 3.30 | 1.40 | 0.30 |
| Tol. | ±0.10 | ±0.10 | ±0.10 | ±0.05 | ±0.10 | ±0.10 | ±0.1 | ±0.3 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |

REEL DIMENSION - Unit: mm, 1000pcs/Reel.







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IMPORTANT NOTES AND DISCLAIMER

- ROHS COMPLIANCE: The levels of RoHS restricted materials in this product are below the maximum
 concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an
 exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for
 this product can be obtained can be obtained at Download Center.
- REACH COMPLIANCE: REACH substances of high concern (SVHCs) information is available for this product.
 Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained at Download Center.
- All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test
 conditions, unless otherwise noted. Product performance may not be indicated by the Electrical
 Characteristics if operated under different conditions.
- 4. NextGen Component, Inc (*NextGen*) reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
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- 8. NextGen requires that customers first obtain an RMA (Returned Merchandise Authorization) number prior to returning any products. Returns must be made within 30 days of the date of invoice, be in the original packaging, unused and like-new condition. At the time of quoting or purchasing, a product may say that it is Non-Cancelable/ Non-Returnable (NCNR). These products are not returnable and not refundable.