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|---|---|--|
| SPECIFICATION SHEET NO. | S0407 - SXF1747RANSS30 | |
| ORIGINAL MFG/PART NO. | Shengxin SAW/SXF1747RANSS02/SXF1702 | |
| NEXTGEN PART CODE | SXF1747RANSS30 | Indicate This Code For RFQ Order |
| DATE | Apr. 7, 2025 | |
| REVISION | A3 | Updated With Most Recent Data |
| DESCRIPTION AND MAIN PARBMETRICS | <p>SMD SAW Filter, 6 Pads, 3030 Type, SXF Series</p> <p>Case code DCC6C, Case Dimension L3.0*W3.0*H1.50mm</p> <p>Center Frequency 1747.5MHz; Insertion Loss: 1.5dB Typical, 2.0dB Max.</p> <p>Amplitude Ripple: 2.0dB Max.</p> <p>Operating Temp. Range -40°C ~ +85°C</p> <p>Reflow Profile Condition 260°C Max.</p> <p>Package in Tape/Reel, 1000pcs/Reel</p> <p>REACH/RoHS/RoHS III Compliant</p> | |
| CUSTOMER | | |
| CUSTOMER PART NUMBER | | |
| CROSS REF. PART NUMBER | | |
| MEMO | | |

| | | | |
|------------------------------|---|--|---|
| VENDOR APPROVE | | | |
| Issued/Checked/Approved |  |  |  |
| Effective Date: Apr. 7, 2025 | | | |

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

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 CHARACTERISTICS

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

HOW TO ORDER

- Please Follow Up Part Code Guide And Indicate NextGen Part Code SXF1747RANSS30 For RFQ and Order.

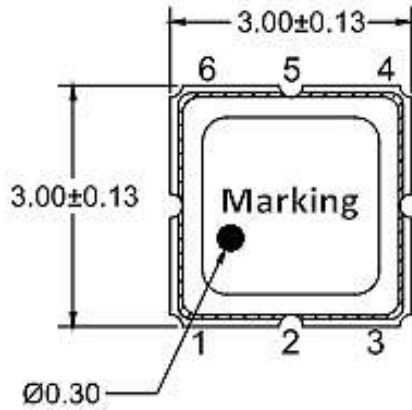
PART CODE GUIDE

RFQ
[Request For Quotation](#)

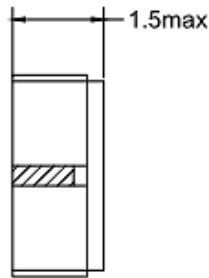
| CODE | NAME | KEY SPECIFICATION OPTION |
|-------|-----------------------------------|---|
| SXF | Series Code | SMD SAW Filter |
| 1747R | Frequency Range Code | 1747R: 1747.5MHz or Custom Frequency Range |
| ANS | Internal Control Code | Letter A~Z, a~z or Digits (1-9) |
| S30 | Dimension Code | S30: Case Dimension L3.0*W3.0*H1.5mm, 6 Pads, 3030 Type |
| XX | 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

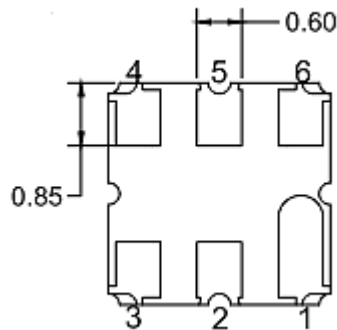
Top View



Side View



Bottom View



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

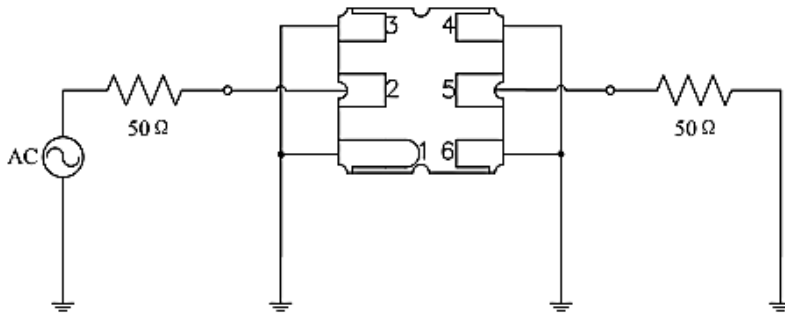
MAX. RATING & CHARACTERISTICS - At 25±2°C Ambient Temperature Unless Otherwise Specified.

| PARAMETER | SYMBOLS | VALUE | UNITS |
|-----------------------------|------------------|------------|-------|
| RF Power Level | P | 10 | dBm |
| DC Voltage | V _{DC} | 3 | V |
| Operating Temperature Range | T _A | -40 to +85 | °C |
| Storage Temperature Range | T _{stg} | -40 to +85 | °C |
| ESD Voltage (MM) | V _{MM} | 50 | V |
| ESD Voltage (HBM) | V _{HBM} | 175 | V |

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

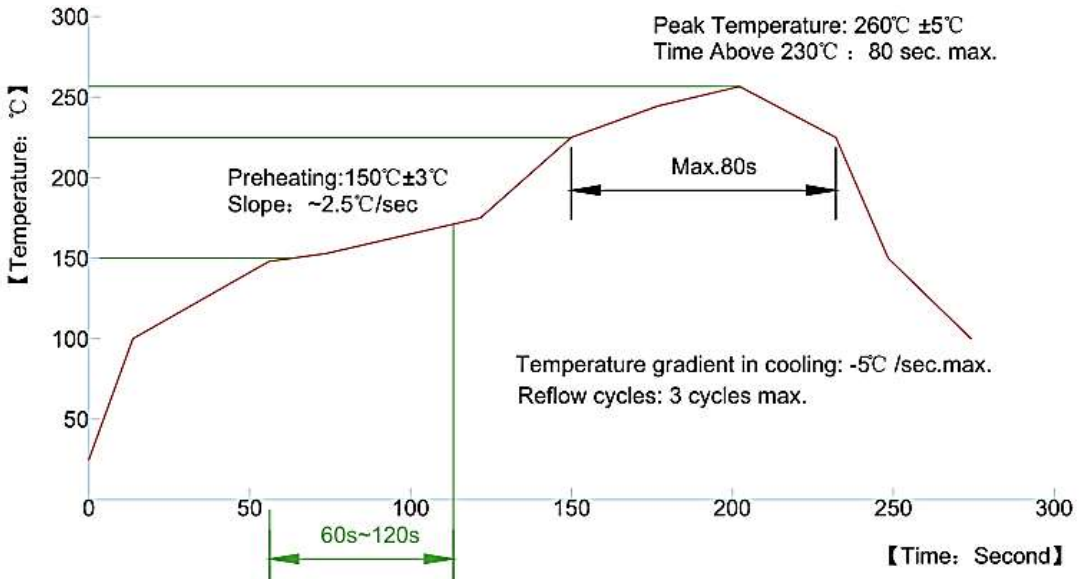
| PARAMETER | FREQUENCY RANGE (MHz) | CHARACTERISTICS | | | |
|----------------------|-----------------------|-----------------|---------|------|------|
| | | MIN. | TYPICAL | MAX. | UNIT |
| Center Frequency | - | - | 1747.5 | - | MHz |
| Insertion Loss | Min | - | 1.5 | 2.0 | dB |
| | 1710 - 1785 | - | 2.5 | 3.0 | dB |
| Amplitude Ripple | 1710 - 1785 | - | 1.5 | 2.0 | dB |
| Passband Ripple | - | - | 0.5 | 0.8 | dB |
| Group Delay Ripple | 1710 - 1785 | - | 18 | 40 | ns |
| VSWR | 1710 - 1785 | - | 1.8 | 2.2 | - |
| Absolute Attenuation | DC - 960 | 20 | 25 | - | dB |
| | 960 - 1690 | 20 | 25 | - | dB |
| | 1690 - 1693 | 15 | 20 | - | dB |
| | 1802 - 1805 | 20 | 25 | - | dB |
| | 1805 - 1880 | 25 | 30 | - | dB |
| | 1880 - 3200 | 23 | 28 | - | dB |

MEASUREMENT CIRCUIT – FOR REFERENCE ONLY

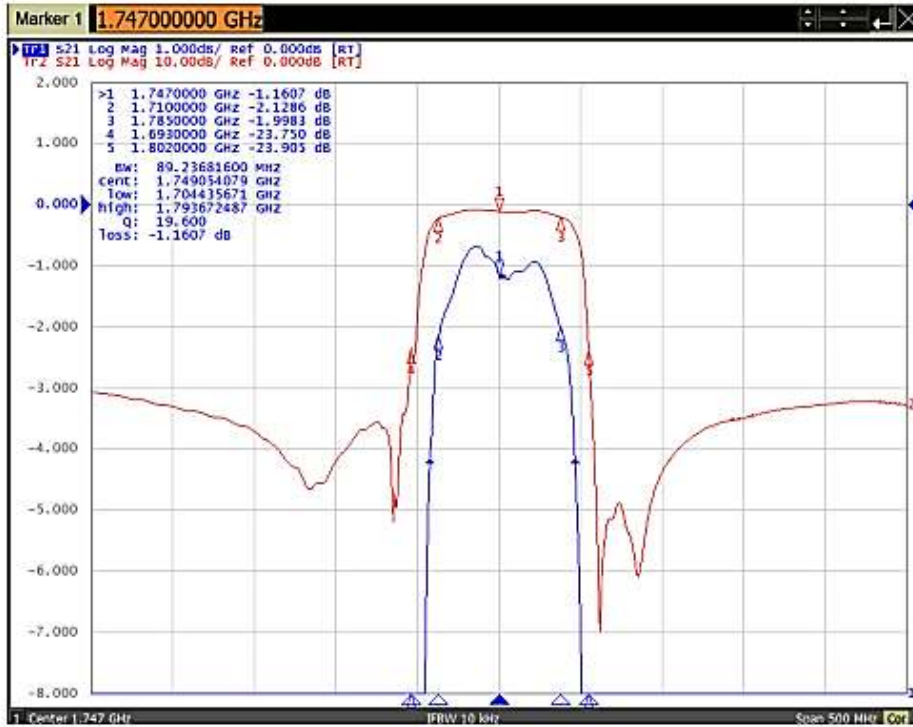


| PIN CONFIGURATION | |
|-------------------|--------------|
| 2 | Input |
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RECOMMENDED SOLDERING PROFILE – FOR REFERENCE ONLY



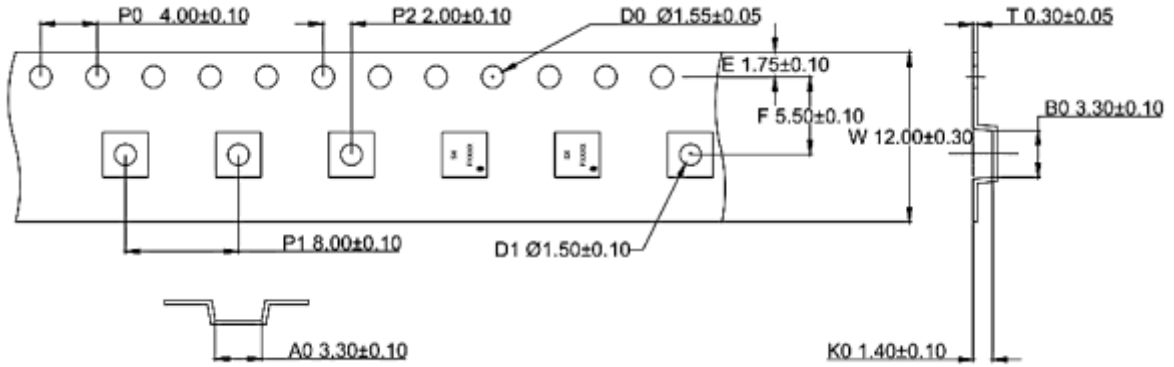
FREQUENCY CHARACTERISTICS – FOR REFERENCE ONLY



RELIABILITY CHARACTERISTICS

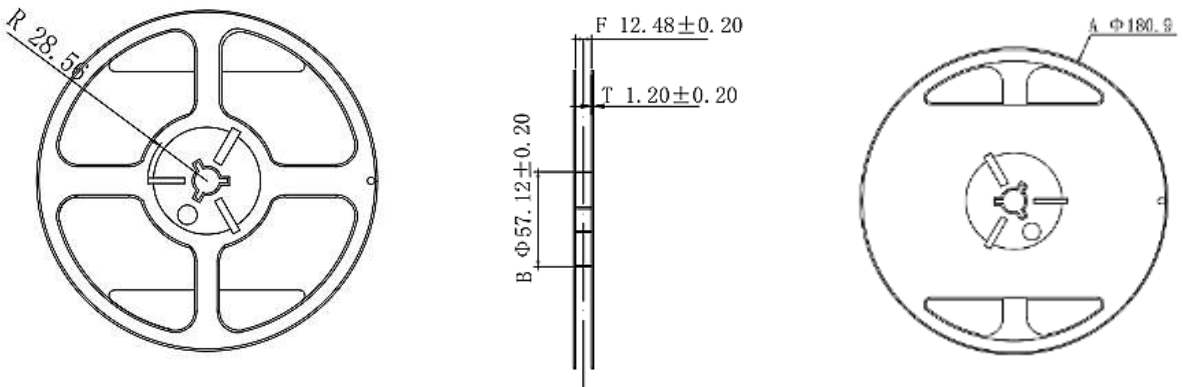
| TEST ITEMS | TEST METHOD AND CONDITIONS |
|--|---|
| High Temperature Storage | <ul style="list-style-type: none"> • Test temperature: +85°C ± 3°C • Duration time: 500 hours • Restore time: 2 hours at the room temperature (25°C) |
| Low Temperature Storage | <ul style="list-style-type: none"> • Test temperature: -40°C ± 3°C • Duration time: 500 hours • Restore time: 2 hours at the room temperature (25°C) |
| High Temperature High Humidity Storage | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | B0 | K0 | T |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|
| Value | 4.00 | 8.00 | 2.00 | Ø1.55 | Ø1.5 | 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.



IMPORTANT NOTES AND DISCLAIMER

1. **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 at Download Center.
2. **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.
3. 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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7. *NextGen* products are not authorized for use as critical components in life support devices or systems without express written approval by *NextGen*.
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.