

# **SPECIFICATION SHEET**

## SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

SPECIFICATION SHEET NO.	S0407 - SXF0434RBNSS30						
ORIGINAL MFG/PART NO.	Shengxin SAW/SXF0434RBNSS02/SXF0443						
NEXTGEN PART CODE	SXF0434RBNSS30 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 434MHz; Insertion Loss: 1.5dB Typical, 3.0dB Max.  Amplitude Ripple: 2.0dB Max.  Operating Temp. Range -40°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: Mar. 7, 2025

# **CUSTOMER APPROVE**

Date:



# PART CODE: **SXF0434RBNSS30**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.



# PART CODE: **SXF0434RBNSS30**SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

#### **HOW TO ORDER**

• Please Follow Up Part Code Guide And Indicate NextGen Part Code <u>SXF0434RBNSS30</u> For RFQ and Order.

#### **PART CODE GUIDE**

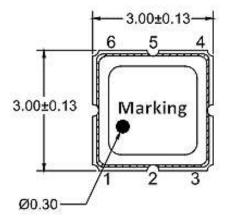


CODE	NAME	KEY SPECIFICATION OPTION
SXF	Series Code	SMD SAW Filter
0434R	Frequency Range Code	0434R: 434.0MHz or Custom Frequency Range
BNS	Internal Control Code	Letter A~Z, a~z or Digits (1-9)
\$30	Dimension Code	S30: Case Dimension L3.0*W3.0*H1.5mm, 6 Pads, 3030 Type
хх	Special/Custom Parameters Code	Blank: N/A  XX: Letter A~Z, a~z or Digits (0~9) for Special/Custom Parameters

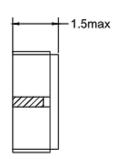
# SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

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

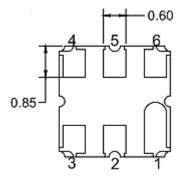
Top View



Side View



**Bottom View** 



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



#### SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

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

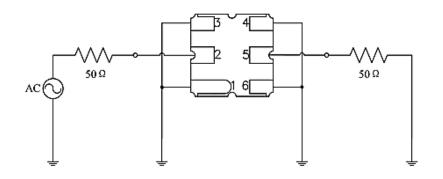
PARAMETER	SYMBOLS	VALUE	UNITS
RF Power Level	Р	10	dBm
DC Voltage	VDC	10	V
AC Voltage	VPP	10V50Hz/60Hz	V
Operating Temperature Range	Та	-40 to +85	°C
Storage Temperature Range	Tstg	-45 to +85	°C
ESD Voltage (MM)	Vмм	50	V
ESD Voltage (HBM)	Vнвм	175	V

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

PARAMETER	FREQUENCY	CHARACTERISTICS					
	RANGE (MHz)	MIN.	TYPICAL	MAX.	UNIT		
Center Frequency	-	-	434	-	MHz		
Insertion Loss	429 - 439	-	1.5	3.0	dB		
Amplitude Ripple	429 – 439	-	1.0	2.0	dB		
Absolute Attenuation	0.3 - 410	40	50	-	dB		
	460 - 1000	40	45	-	dB		
Input/Output Impedance	-	-	50	-	Ohms		

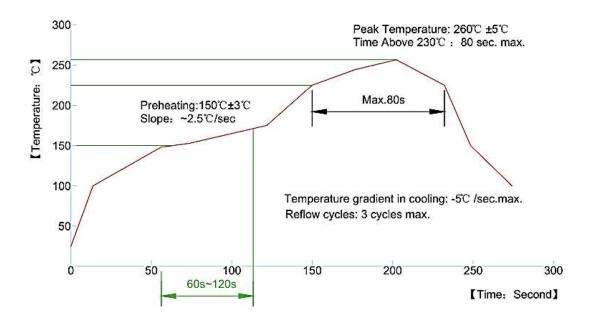
## SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

#### **MEASUREMENT CIRCUIT** – FOR REFERENCE ONLY



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

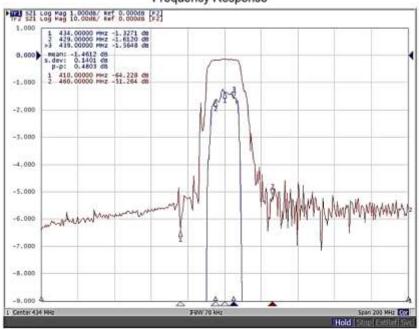
#### **RECOMMENDED SOLDERING PROFILE** – FOE REFERENCE ONLY



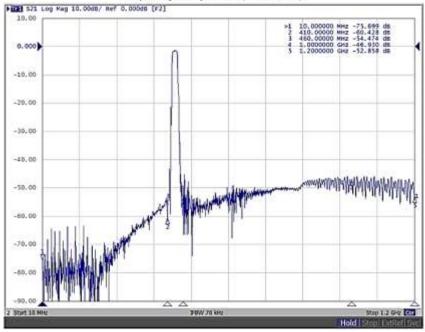


#### FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY

# Frequency Response



#### Frequency Response (wideband)

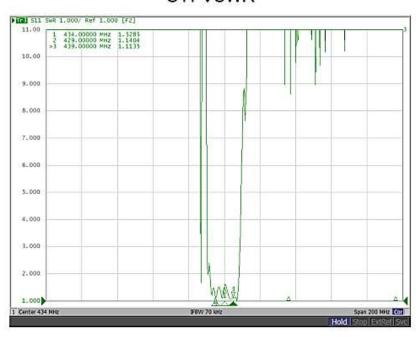




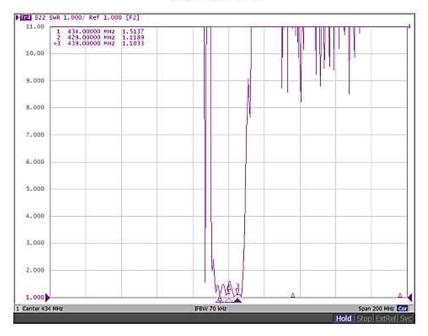
# SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

#### FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY

# S11 VSWR



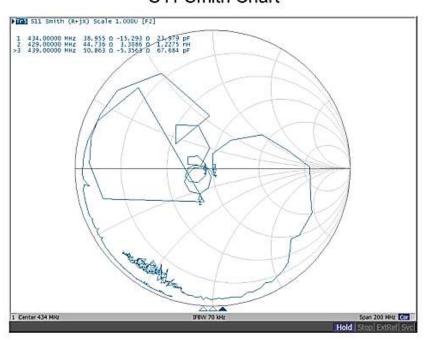
## S22 VSWR



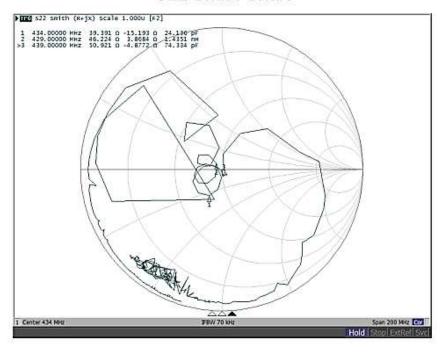


#### FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY

# S11 Smith Chart



## S22 Smith Chart





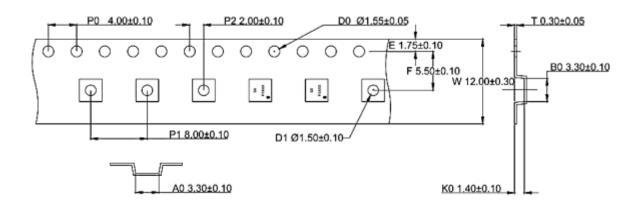
## SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

### **RELIABILITY CHARACTERISTICS**

TEST ITEMS	TEST METHOD AND CONDITIONS
High Temperature Storage	<ul> <li>Test temperature: +85°C±3°C</li> <li>Duration time: 500 hours</li> <li>Restore time: 2 hours at the room temperature (25°C)</li> </ul>
Low Temperature Storage	<ul> <li>Test temperature: -40°C±3°C</li> <li>Duration time: 500 hours</li> <li>Restore time: 2 hours at the room temperature (25°C)</li> </ul>
High Temperature High Humidity Storage	<ul> <li>Test temperature: +85°C±3°C</li> <li>Test Humidity: 85%±3%</li> <li>Duration Hours: 240 hours</li> <li>Restore time: 2 hours at the room temperature (25°C)</li> </ul>
Temperature Cycling	<ul> <li>Test Temperature: -40° _<sub>-10</sub>°C~+85<sup>+10</sup>0°C</li> <li>Time for each step: ≥30min</li> <li>Conversion time: ≤1min</li> <li>Cycle times: 100 times</li> <li>Restore time: 24 hours at the room temperature (25°C)</li> </ul>
Soldering Heat Resistance	<ul> <li>Reflow with 260±5°C, 10±1s (Solder Pot)</li> <li>Restore time: 2 hours at the room temperature (25°C)</li> </ul>
Solderability Test	Soldering method and temperature: lead-free reflow soldering, 245±5 °C for 5±0.5s
Remarks	<ul> <li>Please be certain not to apply voltage above the rated voltage of SAW components.</li> <li>Please be sure that the component operate within the specified operating temperature range.</li> <li>Abrupt temperature change shall be avoided because deterioration of the component characteristics can occur under that situation.</li> <li>Please be careful of soldering temperature when soldering.</li> <li>Please do not place soldering iron on the body of components.</li> <li>Please be careful not to subject the terminals or leads of components to excessive force.</li> </ul>

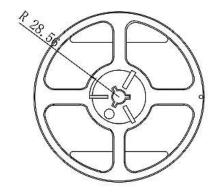
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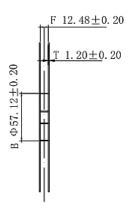
**TAPE DIMENSION** - Unit: mm, All Devices are packed in accordance with EIA standard RS-481-2.

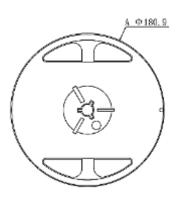


Size	P0	P1	P2	D0	D1	E	F	W	A0	во	КО	Т
Value	4.00	8.00	2.00	Ф1.55	Ф1.5	1.75	5.50	12.0	3.30	3.30	1.40	0.30
Tol.	±0.10	±0.10	±0.10	±0.05	±0.10	±0.10	±0.1	±0.3	±0.1	±0.1	±0.1	±0.05

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







#### SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

#### **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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