

# **SPECIFICATION SHEET**

SMD SAW FILTER 6 PADS 3030 TYPE SXF SERIES

SPECIFICATION SHEET NO.	S0407 - SXF0915RANSS30							
ORIGINAL MFG/PART NO.	Shengxin SAW/SXF0915RANSS02/SXF0905							
NEXTGEN PART CODE	SXF0915RANSS30 Indicate This Code For <u>RFO</u> 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 915MHz; Insertion Loss: 2.2dB Typical, 3.5dB 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								
ΜΕΜΟ								

# VENDOR APPROVE Issued/Checked/Approved Issued/Checked/Approved/Approved

 CUSTOMER APPROVE

 Date:

 4/7/2025
 1



# PART CODE: **SXF0915RANSS30** 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

#### 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.

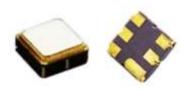


Image shown is a representation only. Exact specifications should be obtained from the product dimension.





# HOW TO ORDER

• Please Follow Up Part Code Guide And Indicate NextGen Part Code <u>SXF0915RANSS30</u> For RFQ and Order.

# PART CODE GUIDE

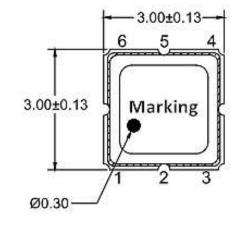


CODE	NAME	KEY SPECIFICATION OPTION
SXF	Series Code	SMD SAW Filter
0915R	Frequency Range Code	0915R: 915.0MHz or Custom Frequency Range
ANS	Internal Control Code	Letter A~Z, a~z or Digits (1-9)
S30	Dimension Code	S30: Case Dimension L3.0*W3.0*H1.5mm, 6 Pads, 3030 Type
ХХ	Special/Custom Parameters Code	Blank: N/A XX: Letter A~Z, a~z or Digits (0~9) for Special/Custom Parameters

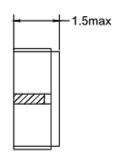


#### DIMENSION - Unit: mm, L3.0\*W3.0\*H1.5mm

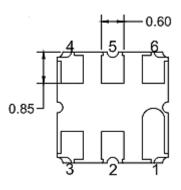
**Top View** 



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	-40 to +85	°C
Storage Temperature Range	Tstg	-45 to +85	°C
ESD Voltage (MM) VMM		50	V
ESD Voltage (HBM)	Vнвм	175	V

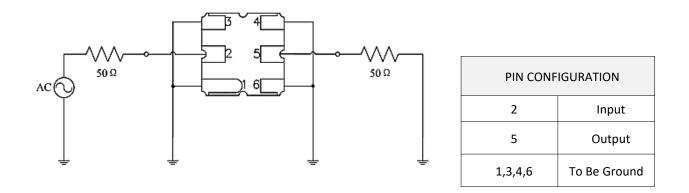
# **ELECTRONICAL CHARACTERISTICS** - At 25±2°C Ambient Temperature Unless Otherwise Specified.

PARAMETER	FREQUENCY	CHARACTERISTICS					
	RANGE (MHz)	MIN.	TYPICAL	MAX.	UNIT		
Center Frequency	-	-	915	915 - 1			
Insertion Loss	902 - 928	-	2.2	dB			
Amplitude Ripple	902 - 928	-	0.6	2.0	dB		
VSWR	902 - 928	-	- 1.6		-		
Absolute Attenuation	DC - 800	50	63	-	dB		
	800 - 880	40 48		-	dB		
	960 - 1080	32	39	-	dB		
	1080 -1500	45	65	-	dB		
	1500 - 3000	22	28	-	dB		

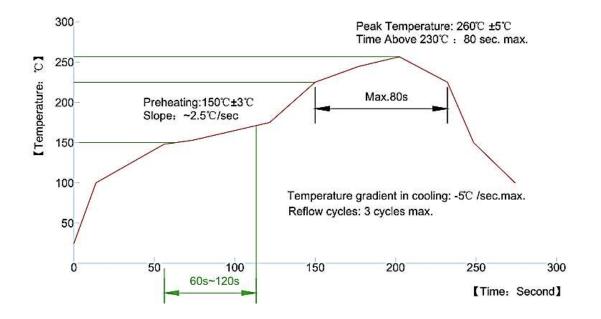
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### **MEASUREMENT CIRCUIT** – FOR REFERENCE ONLY



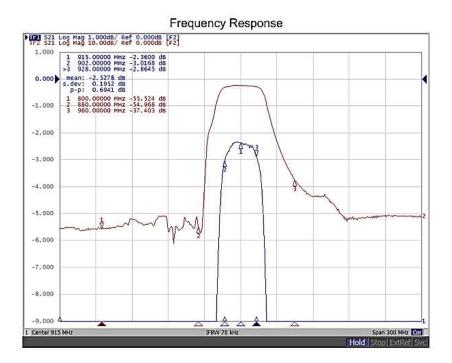
#### **RECOMMENDED SOLDERING PROFILE** – FOE REFERENCE ONLY

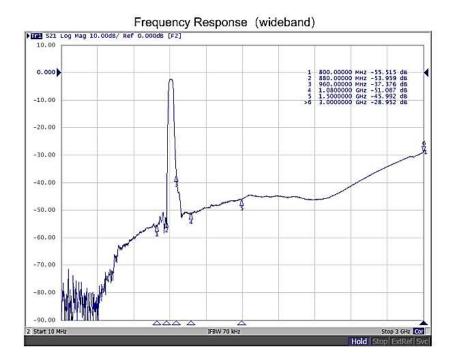




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## FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY



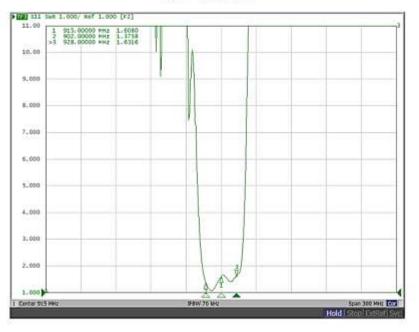


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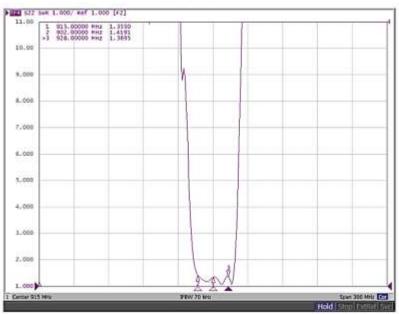


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## FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY



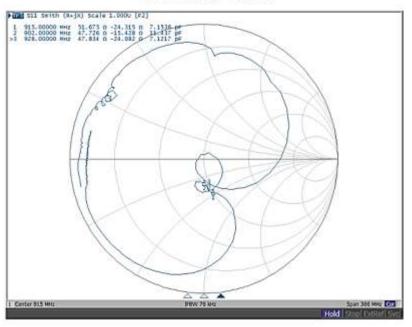
# S11 VSWR



S22 VSWR

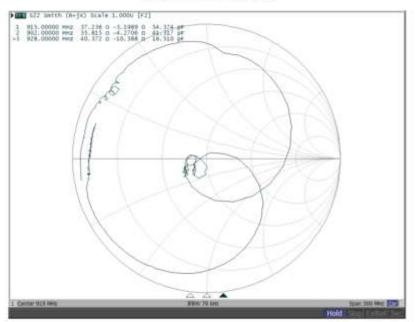


# FREQUENCY CHARACTERISTICS - FOR REFERENCE ONLY



S11 Smith Chart

S22 Smith Chart





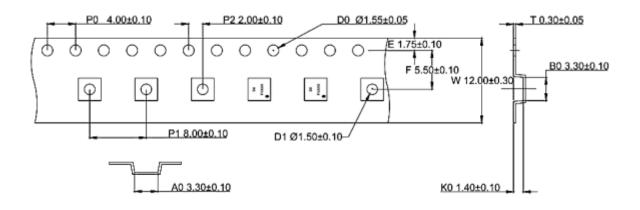
# **RELIABILITY CHARACTERISTICS**

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°10°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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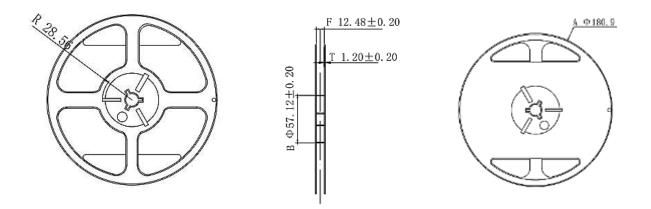


TAPE DIMENSION - Unit: mm, All Devices are packed in accordance with EIA standard RS-481-2.



Size	PO	P1	P2	D0	D1	E	F	W	A0	BO	КО	Т
Value	4.00	8.00	2.00	Φ1.55	Φ1.5	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

- 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 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.

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