

SPECIFICATION SHEET NO.	S0407 - SXF1575RDNSS30	
ORIGINAL MFG/PART NO.	Shengxin SAW/SXF1575RDNSS02/SXF1506	
NEXTGEN PART CODE	SXF1575RDNSS30	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 1575.42MHz; Insertion Loss: 1.85dB Typical, 3.0dB Max.</p> <p>Amplitude Ripple: 2.0dB Max.</p> <p>Operating Temp. Range -40°C ~ +70°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

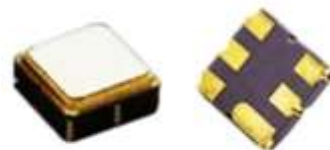


Image shown is a representation only. Exact specifications should be obtained from the product dimension.



APPLICATION

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

ELECTRICAL CHARBCTERISTICS

- 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 SXF1575RDNSS30 For RFQ and Order.

PART CODE GUIDE

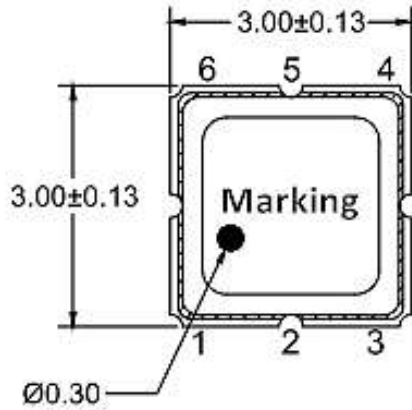
RFQ

[Request For Quotation](#)

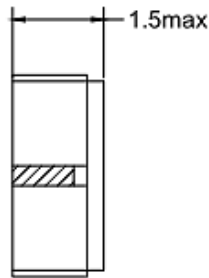
CODE	NAME	KEY SPECIFICATION OPTION
SXF	Series Code	SMD SAW Filter
1575R	Frequency Range Code	1575R: 1575.42MHz or Custom Frequency Range
DNS	Internal Control Code	Letter A~Z, a~z or Digits (1-9)
S30	Dimension Code	S30: Case Dimension L3.0*W3.0*H1.5mm, 6 Pads, 3030 Type
XX	Special/Custom Parameters Code	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

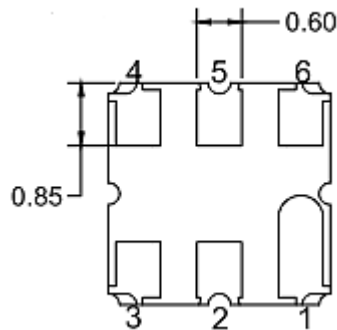
Top View



Side View



Bottom View



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

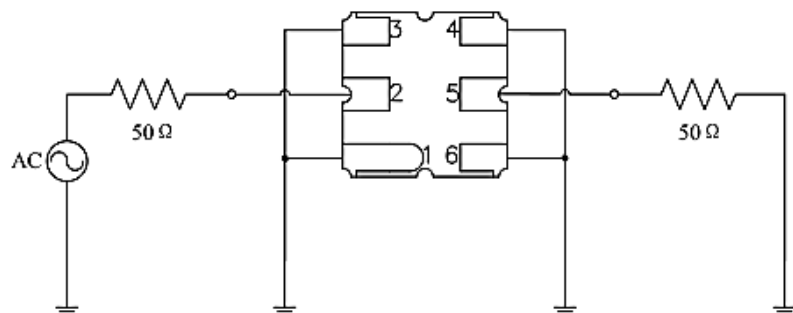
MAX. RATING & CHARACTERISTICS - At 25±2°C Ambient Temperature Unless Otherwise Specified.

PARAMETER	SYMBOLS	VALUE	UNITS
RF Power Level	P	10	dBm
DC Voltage	V _{DC}	3	V
Operating Temperature Range	T _A	-40 to +70	°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.

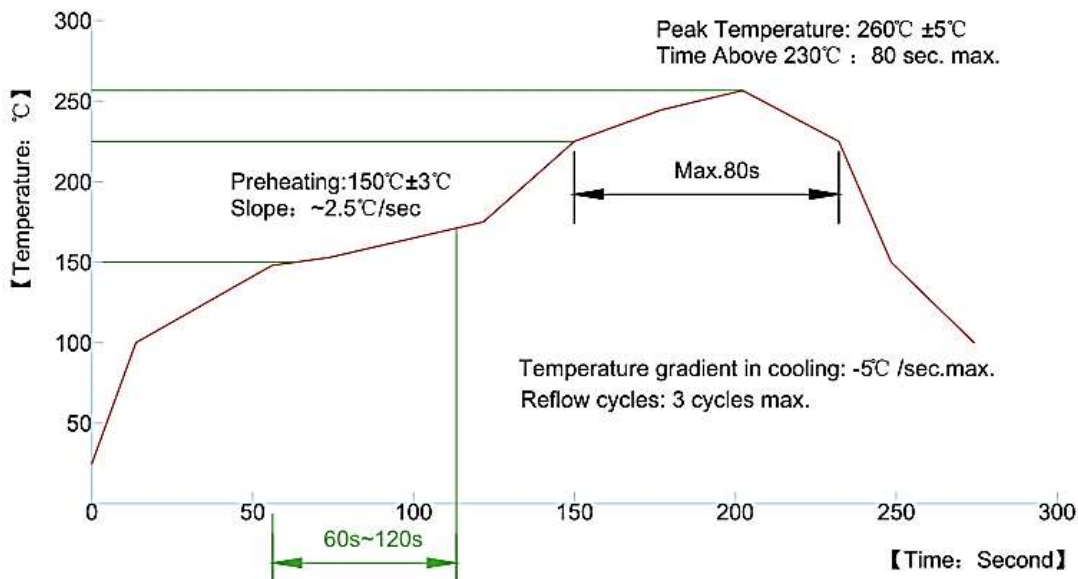
PARAMETER	FREQUENCY RANGE (MHz)	CHARACTERISTICS			
		MIN.	TYPICAL	MAX.	UNIT
Center Frequency	-	-	1575.42	-	MHz
Insertion Loss	1559.052 – 1591.788	-	1.85	3.0	dB
Amplitude Ripple	1559.052 – 1591.788	-	0.4	2.0	dB
Absolute Attenuation	1467 – 1519	35	38.3	-	dB
	1519 - 1527	20	38.3	-	dB
	1617 - 1677	37	45	-	dB

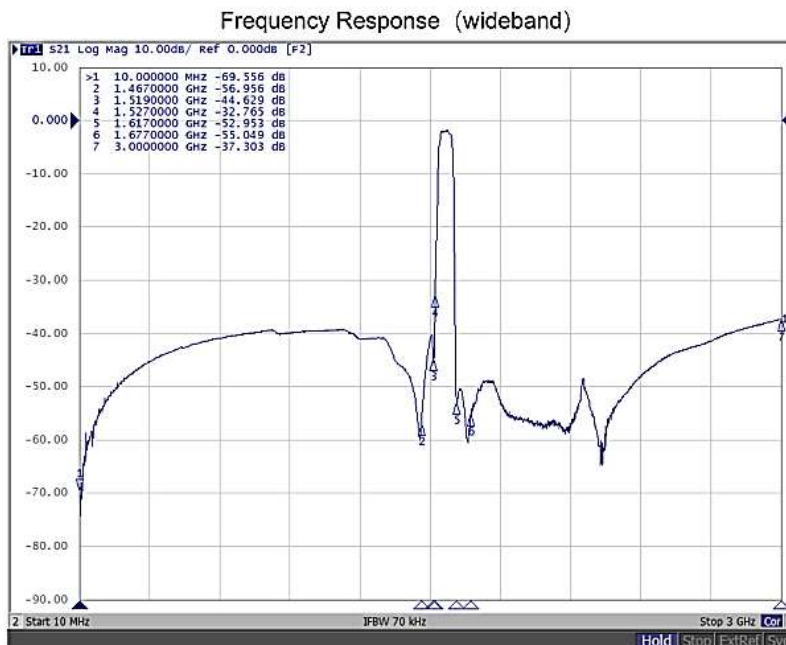
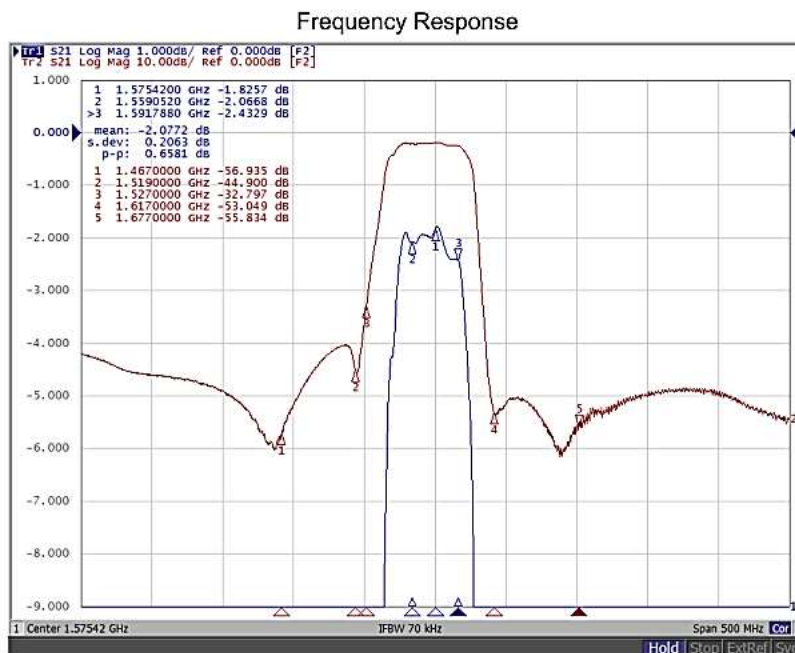
MEASUREMENT CIRCUIT – FOR REFERENCE ONLY



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

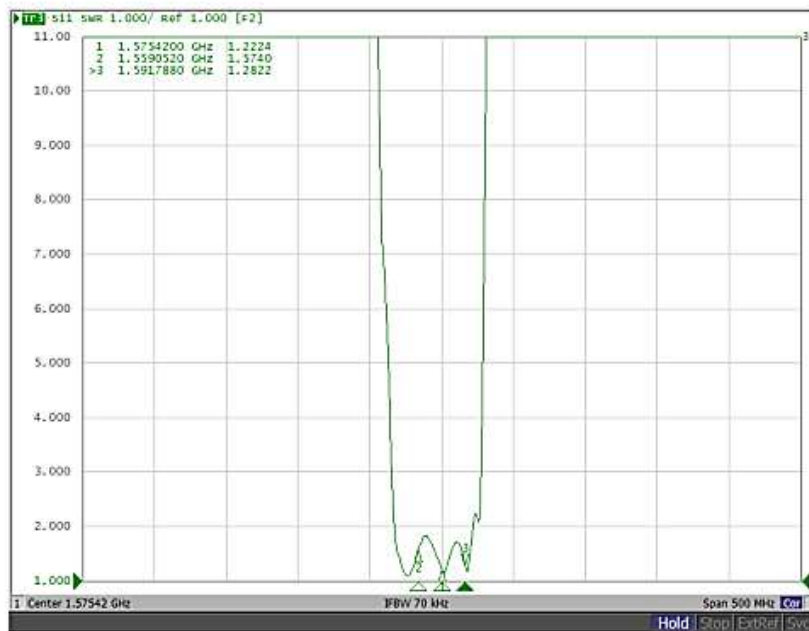
RECOMMENDED SOLDERING PROFILE – FOR REFERENCE ONLY



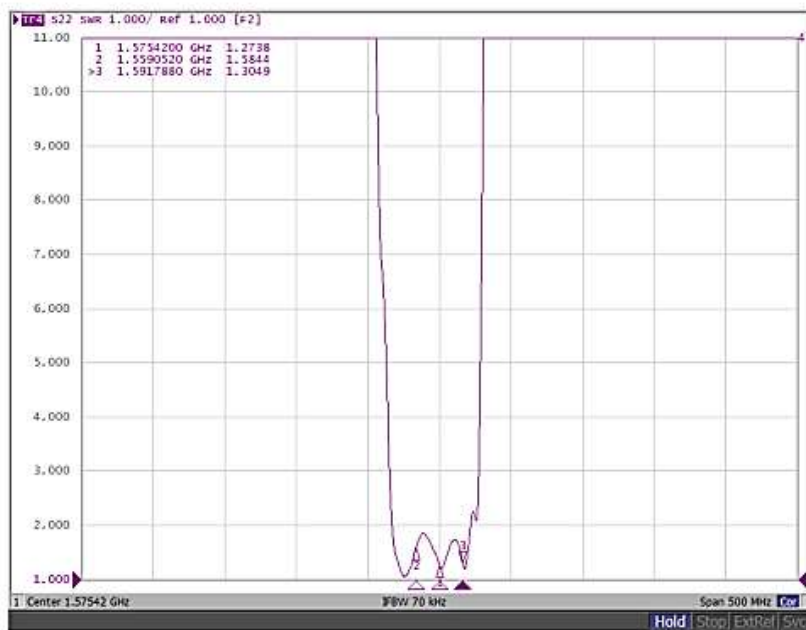
FREQUENCY CHARACTERISTICS – FOR REFERENCE ONLY


FREQUENCY CHARACTERISTICS – FOR REFERENCE ONLY

S11 VSWR

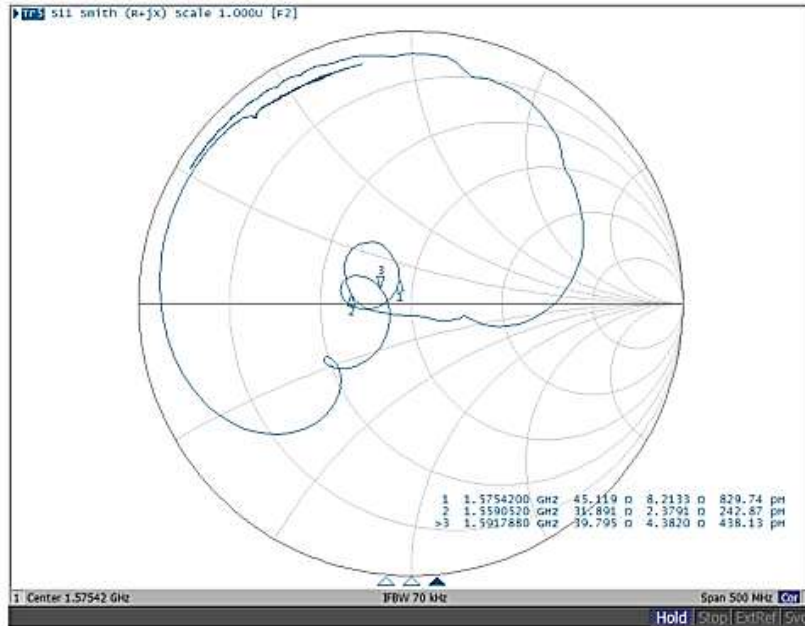


S22 VSWR

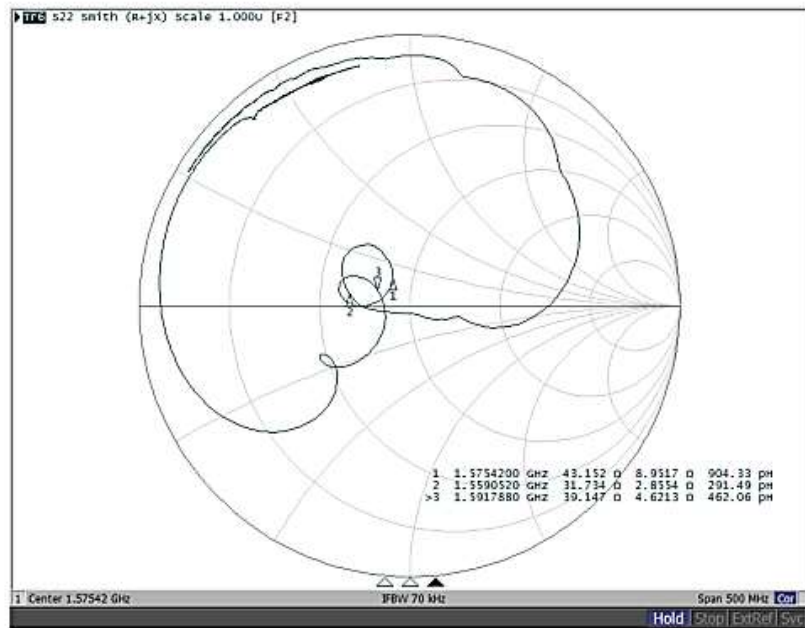


FREQUENCY CHARACTERISTICS – FOR REFERENCE ONLY

S11 Smith Chart



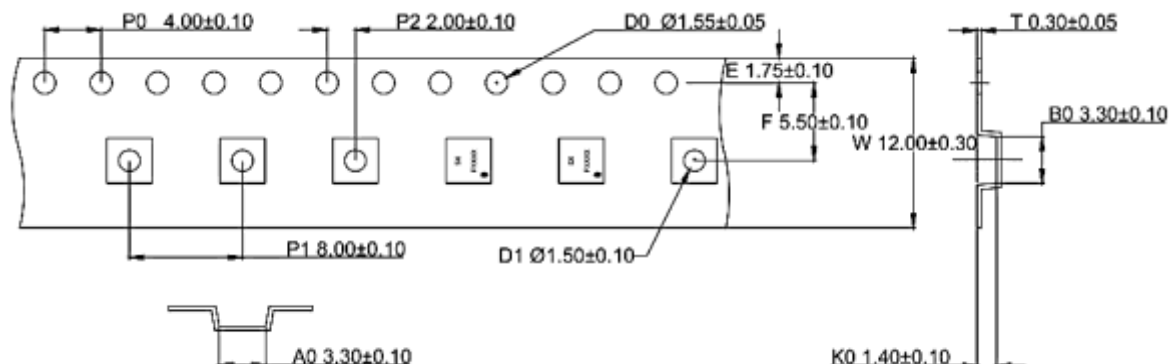
S22 Smith Chart



RELIABILITY CHARACTERISTICS

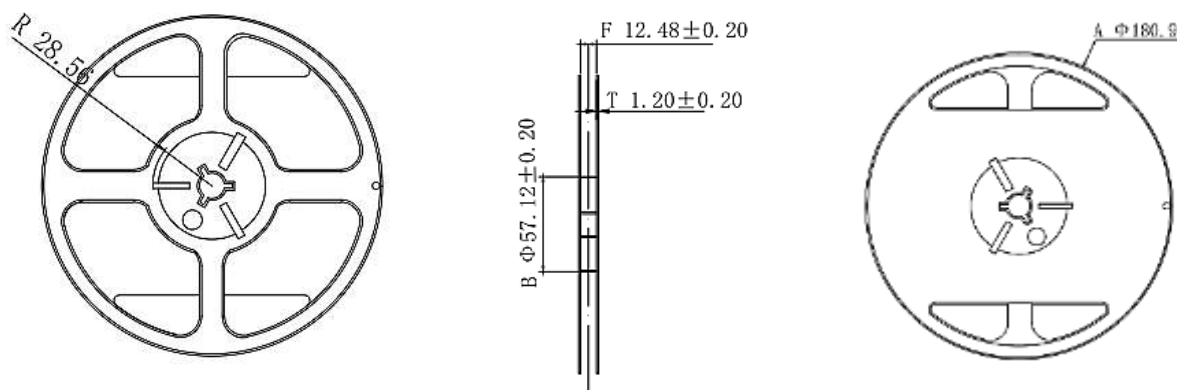
TEST ITEMS	TEST METHOD AND CONDITIONS
High Temperature Storage	<ul style="list-style-type: none"> • Test temperature: $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ • Duration time: 500 hours • Restore time: 2 hours at the room temperature (25°C)
Low Temperature Storage	<ul style="list-style-type: none"> • Test temperature: $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ • 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: $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ • Test Humidity: $85\% \pm 3\%$ • Duration Hours: 240 hours • Restore time: 2 hours at the room temperature (25°C)
Temperature Cycling	<ul style="list-style-type: none"> • Test Temperature: $-40^{\circ} \sim -10^{\circ}\text{C} \sim +85^{\circ} \sim +100^{\circ}\text{C}$ • Time for each step: $\geq 30\text{min}$ • Conversion time: $\leq 1\text{min}$ • 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 $260 \pm 5^{\circ}\text{C}$, $10 \pm 1\text{s}$ (Solder Pot) • Restore time: 2 hours at the room temperature (25°C)
Solderability Test	Soldering method and temperature: lead-free reflow soldering, $245 \pm 5^{\circ}\text{C}$ for $5 \pm 0.5\text{s}$
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.
5. *NextGen* makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does *NextGen* assume any liability for application assistance or customer product design.
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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.