



Features


- ◇ For IF SAW filter
- ◇ Single-ended operation
- ◇ Ceramic Surface Mount Package
- ◇ Small size
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

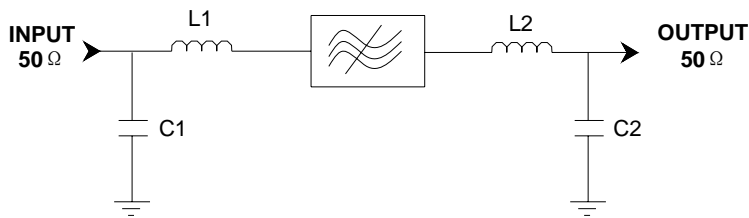
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	158.52	-
Insertion Loss	dB	-	20	-
1 dB Bandwidth	MHz	20	21.15	-
3 dB Bandwidth	MHz	-	22.2	-
40 dB Bandwidth	MHz	-	26.55	28
Passband Variation	dB	-	0.8	1
VSWR	-	-	5.65/4.89	-
Group Delay Variation($f_0 \pm 10\text{MHz}$)	nsec	-	50	200
Absolute Delay	usec	-	0.81	1.6
Ultimate Rejection	@ $f_0 \pm 14\text{MHz}$	dB	35	-
	@ $f_0 \pm 31\text{MHz}$	dB	50	-
Material Temperature coefficient	KHz/°C	-2.85		
Substrate Material	-	112LT		
Ambient Temperature	°C	25		
Operating Temperature Range	°C	-40	-	+85
Storage Temperature Range	°C	-45	-	+105
DC Voltage	V	0		
Input Power	dBm	-	-	10
ESD Class	-	1A		
Package Size	SMD7.0*5.0			

Notes:

1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
4. This is the optimum impedance in order to achieve the performance show.

	SIPAT Co., Ltd. (CETC No.26 Research Institute) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBT15903	
		Rev. Date	2009-06-03	
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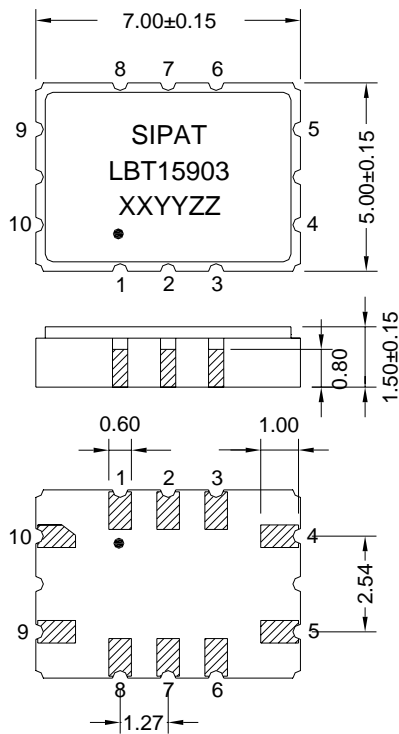
Matching Configuration



$L1 = (82 + 27)nH$ $L2 = 120nH$
 $C1 = 27pF$ $C2 = 15pF$
Source/Load Impedance = 50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input: 9
Output: 4
Ground: All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBT15903: Part Number
- 4) XXYY: Date (Year/month)
- 5) ZZ: Identified Code

Package: SMD7.0*5.0

Unit: mm



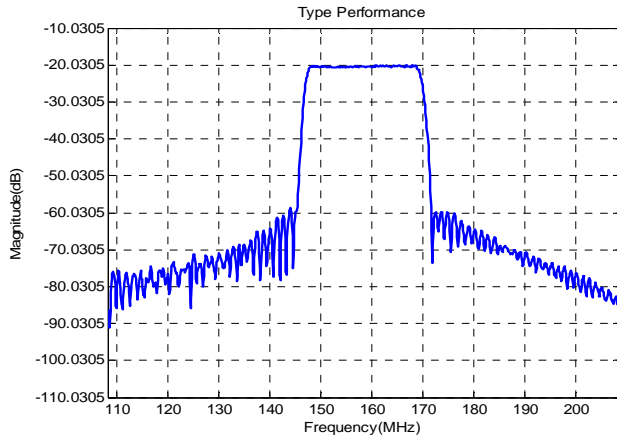
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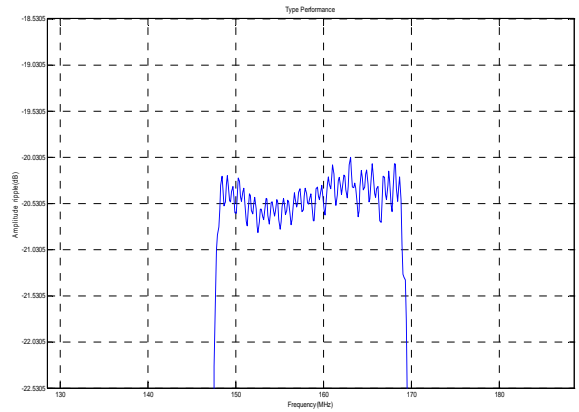
Typical Performance

Frequency Respond



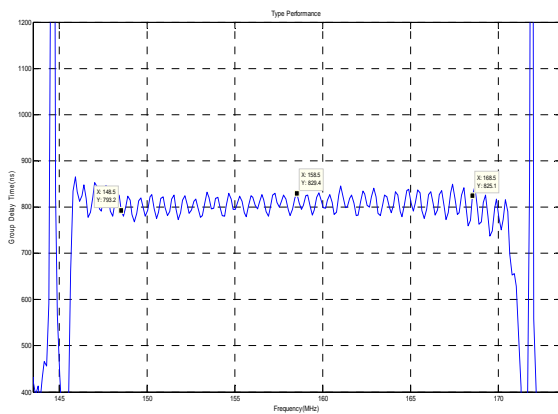
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



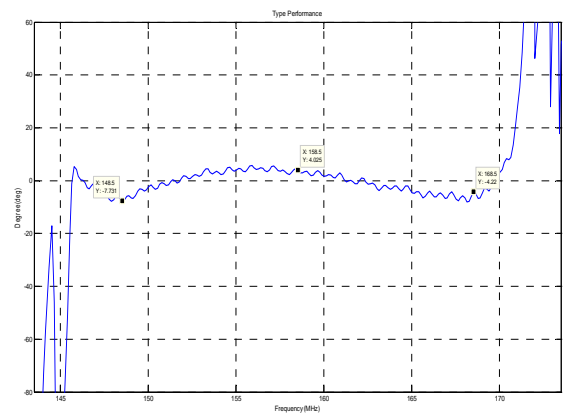
Horizontal: 10MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±10MHz)



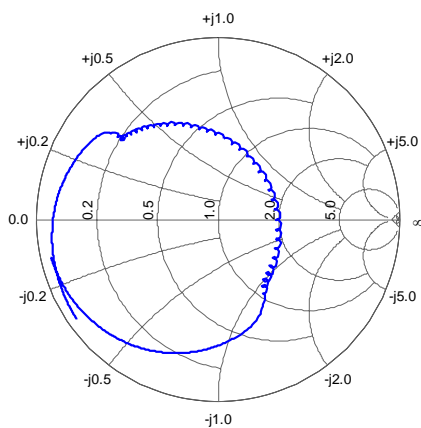
Horizontal: 5MHz/Div Vertical: 100ns/Div

Phase Linearity(f0±10MHz)

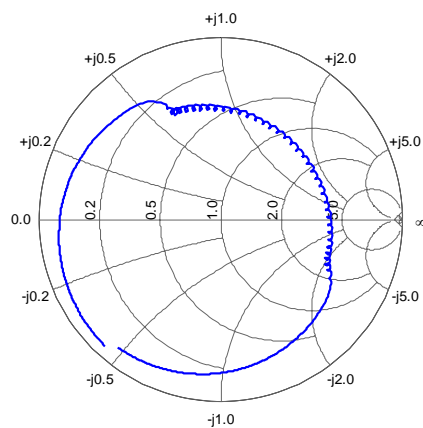


Horizontal: 5MHz/Div Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22



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