



Features


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

Specifications

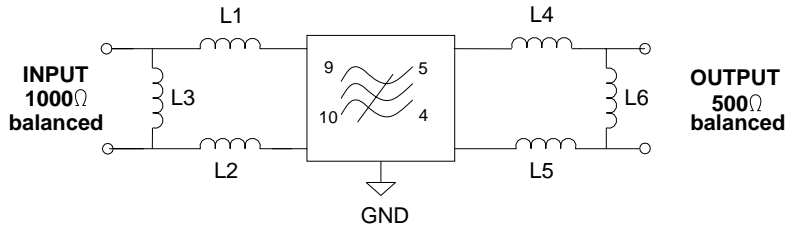
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	110	-
Insertion Loss	dB	-	8.9	11.5
5 dB Bandwidth	MHz	1.26	1.33	-
33 dB Bandwidth	MHz	-	1.76	-
Passband Variation($f_0 \pm 0.3\text{MHz}$)	dB	-	0.5	1
Phase Linearity($f_0 \pm 0.62\text{MHz}$)(p-p)	deg	-	12	-
Absolute Delay	usec	-	0.98	-
Ultimate Rejection	$f_0 \pm 0.9\text{MHz}$	dB	32	-
	$f_0 \pm 1.7\text{MHz}$	dB	37	-
	$f_0 \pm 2\text{MHz}$	dB	35	-
	$f_0 \pm 9\text{MHz}$	dB	45	-
Material Temperature coefficient	KHz/°C	0.11		
Substrate Material	-	Qz		
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	LBS11003	
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Matching Configuration



L1=L2=33nH L3=150nH

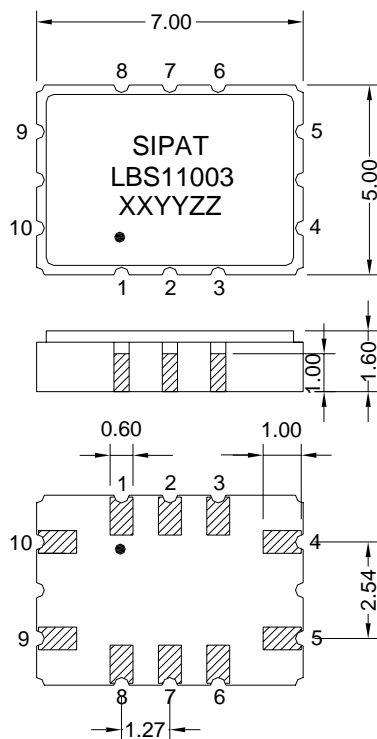
L4=L5=27nH L6=180nH

Source Impedance=1000ohm

Load Impedance=500ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 9,10

Output 5,4

Ground All Others

Marking Configuration:

- 1) SIPAT: Manufacturer Name
- 2) LBS11003: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: SMD7.0*5.0

Unit: mm



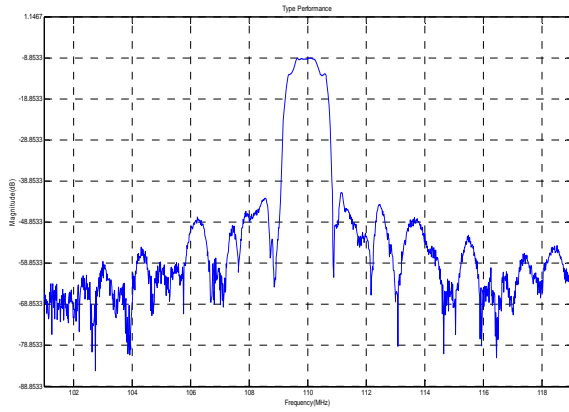
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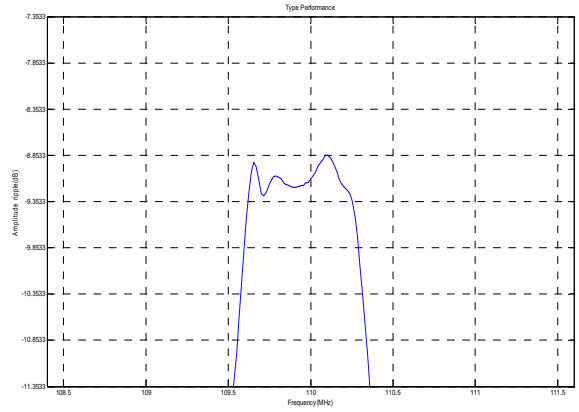
Typical Performance

Frequency Respond



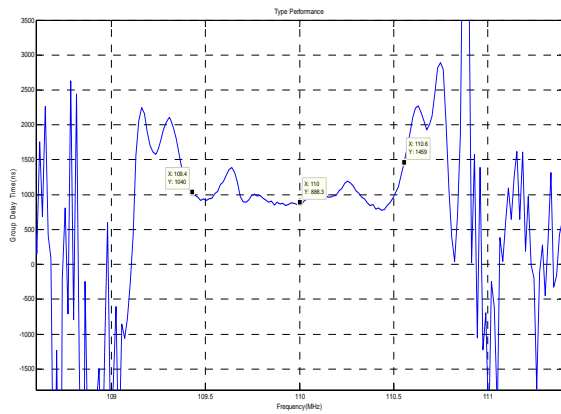
Horizontal: 2MHz/Div Vertical: 10dB/Div

Passband Respond



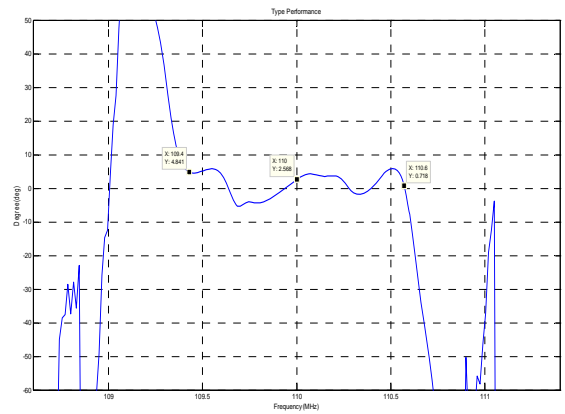
Horizontal: 0.5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 0.6$ MHz)



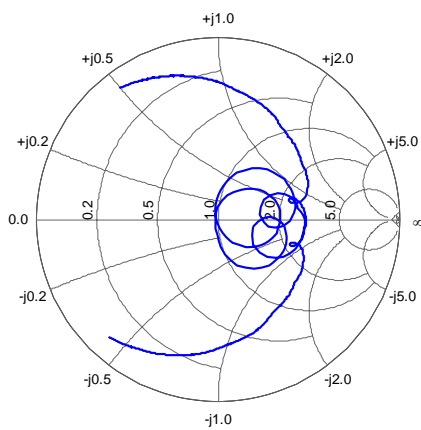
Horizontal: 0.5MHz/Div Vertical: 500ns/Div

Phase Linearity($f_0 \pm 0.6$ MHz)

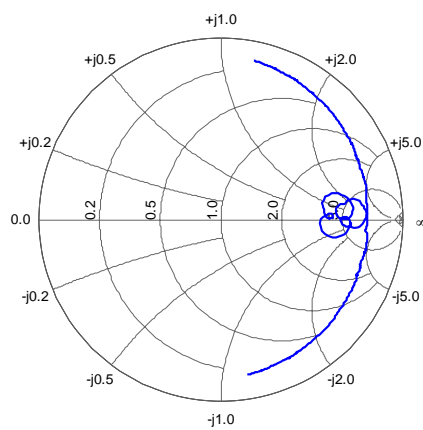


Horizontal: 0.5MHz/Div Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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