



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	113.7	114	114.3
Insertion Loss		dB	-	11.8	15
1 dB Bandwidth		MHz	5	6.27	-
3 dB Bandwidth		MHz	-	7	-
40 dB Bandwidth		MHz	-	9.46	11
Passband Variation		dB	-	0.5	1
Group Delay Variation(f0±2.5MHz)		nsec	-	45	100
Phase Linearity(f0±2.5MHz)		deg	-	3	5
Absolute Delay		usec	-	1.38	-
Ultimate Rejection	f0-5.5MHz	dB	40	45	-
	f0+5.5MHz	dB	40	46	-
Material Temperature coefficient		KHz/°C	-2.05		
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		SMD13.3*6.5			

Notes:

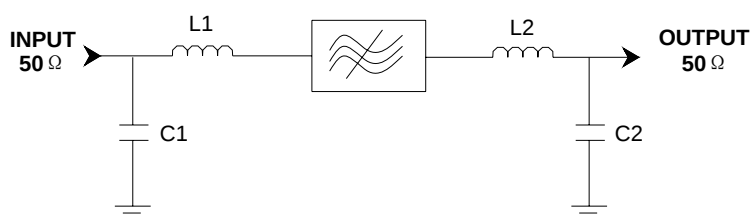
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



SIPAT Co., Ltd.
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Part Number	LBT11405		
Rev. Date	2010-04-07		
Ver.	1.1	Page 1/3	

Matching Configuration



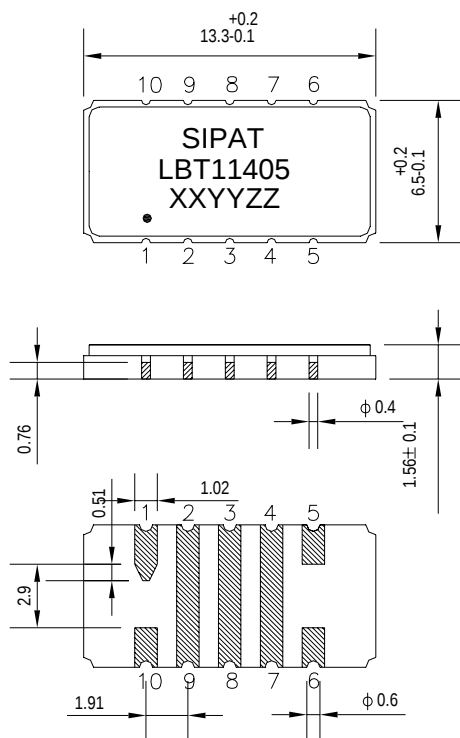
$$L1 = (120 + 27) \text{ nH} \quad L2 = (150 + 15) \text{ nH}$$

$$C1 = C2 = 56 \text{ pF}$$

Source / Load Impedance = 50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input: 10

Output: 5

Ground: All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBT11405: Part Number
- 4) XXYY: Date (Year/month)
- 5) ZZ: Identified Code

Package: SMD13.3*6.5

Unit: mm



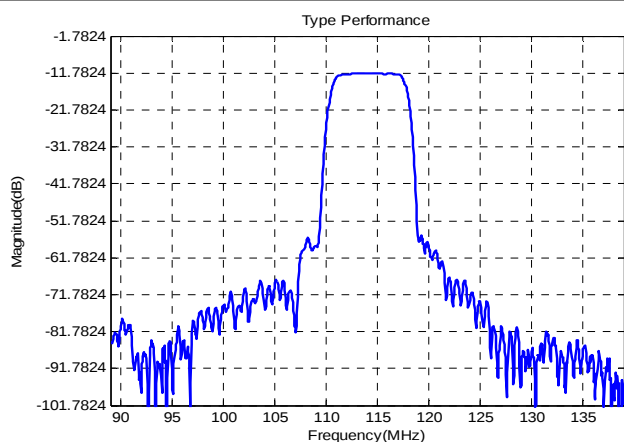
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Typical Performance

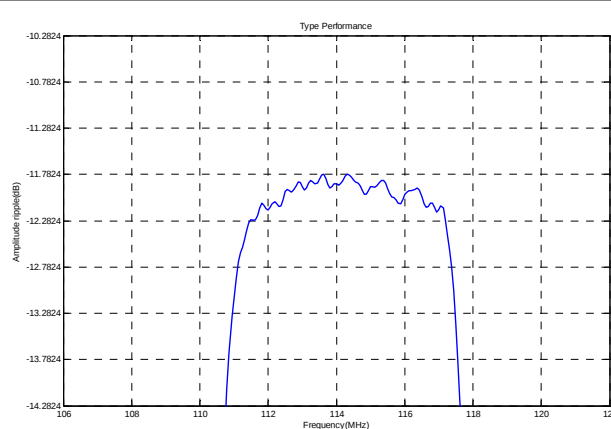
Frequency Respond



Horizontal: 5MHz/Div

Vertical: 10dB/Div

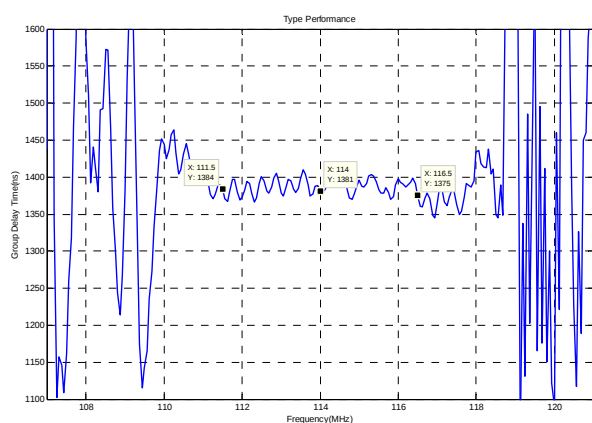
Passband Respond



Horizontal: 2MHz/Div

Vertical: 0.5dB/Div

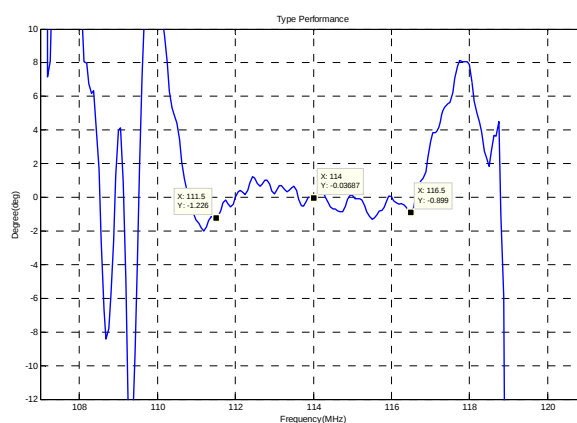
Group Delay Variation($f_0 \pm 2.5$ MHz)



Horizontal: 2MHz/Div

Vertical: 50ns/Div

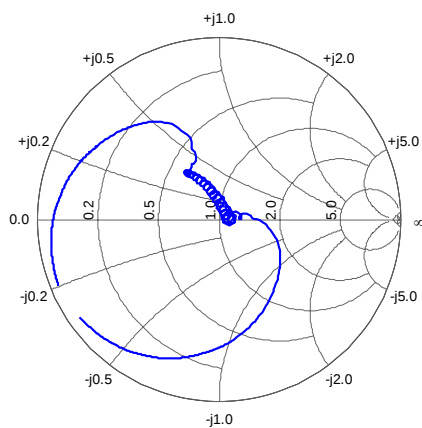
Phase Linearity($f_0 \pm 2.5$ MHz)



Horizontal: 2MHz/Div

Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22

