



Features

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

Specifications

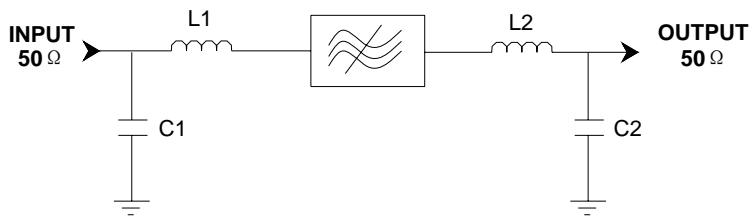
Parameter	Unit	Minimum	Typical	Maximum	
Center Frequency	MHz	113.7	114	114.3	
Insertion Loss	dB	-	11.8	15	
1 dB Bandwidth	MHz	5	6.27	-	
3 dB Bandwidth	MHz	-	7	-	
40 dB Bandwidth	MHz	-	9.46	11	
Passband Variation	dB	-	0.5	1	
Group Delay Variation($f_0 \pm 2.5\text{MHz}$)	nsec	-	45	100	
Phase Linearity($f_0 \pm 2.5\text{MHz}$)	deg	-	3	5	
Absolute Delay	usec	-	1.38	-	
Ultimate Rejection	$f_0 - 5.5\text{MHz}$	dB	40	45	-
	$f_0 + 5.5\text{MHz}$	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:

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	LBT11405	
		Rev. Date	2010-04-07	
		Ver.	1.1	Page

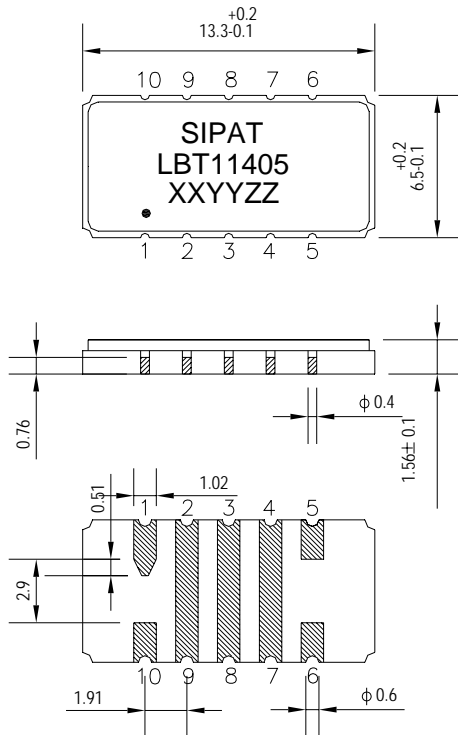
Matching Configuration



$L1 = (120 + 27)nH$ $L2 = (150 + 15)nH$
 $C1 = C2 = 56pF$
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

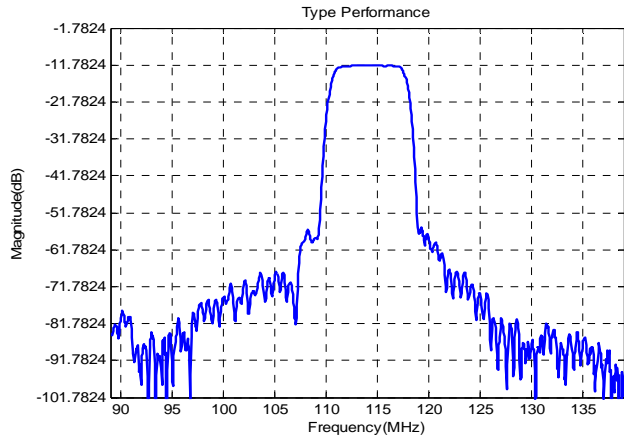


SIPAT Co., Ltd.
(CETC No.26 Research Institute)
#14 Nanping Huayuan Road,
Chongqing, China, 400060

Part Number	LBT11405	
Rev. Date	2010-04-07	
Ver.	1.1	Page 2/3

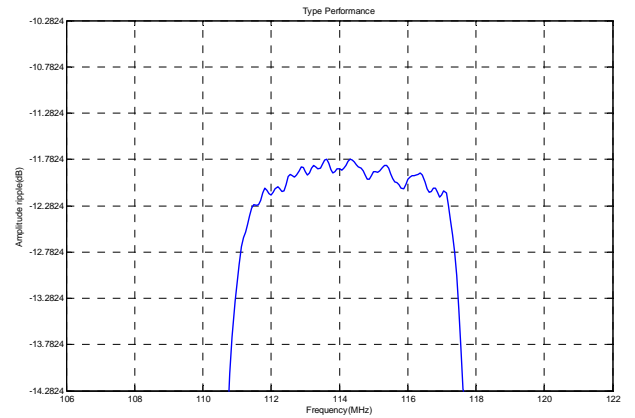
Typical Performance

Frequency Respond



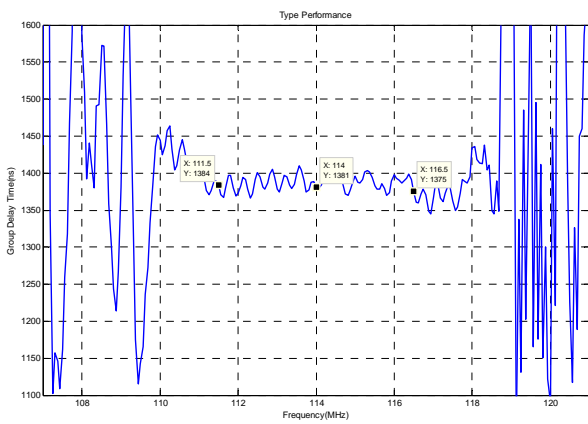
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



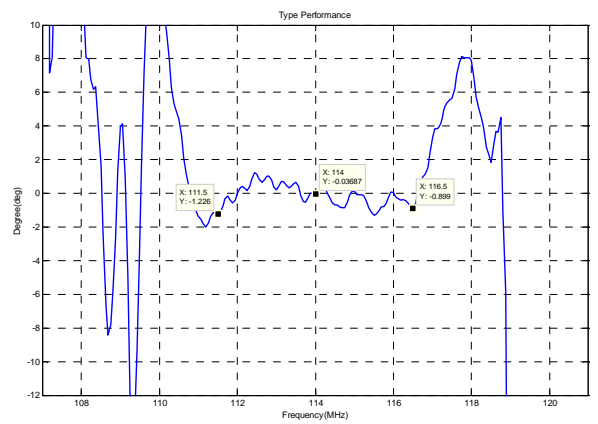
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±2.5MHz)



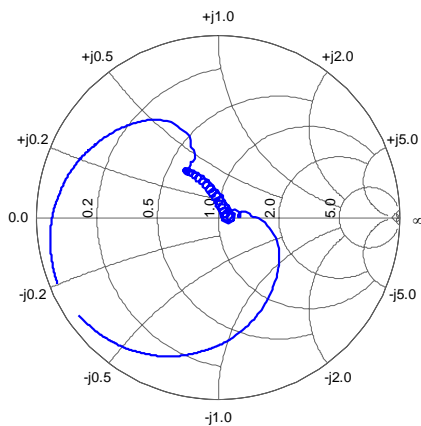
Horizontal: 2MHz/Div Vertical: 50ns/Div

Phase Linearity(f0±2.5MHz)

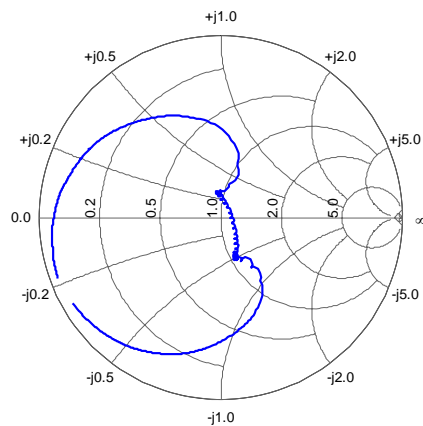


Horizontal: 2MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



SIPAT Co., Ltd.
(CETC No.26 Research Institute)
#14 Nanping Huayuan Road,
Chongqing, China, 400060

Part Number	LBT11405	
Rev. Date	2010-04-07	
Ver.	1.1	Page 3/3