



Features

- ✧ For IF SAW filter
- ✧ High attenuation
- ✧ Single-ended operation
- ✧ Dual In-line Package
- ✧ RoHS compliant (2002/95/EC), Pb-free

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.7	140	140.3
Insertion Loss	dB	-	25.8	28
1 dB Bandwidth	MHz	45	46.29	-
3 dB Bandwidth	MHz	48	48.77	-
40 dB Bandwidth	MHz	-	58.35	60
50 dB Bandwidth	MHz	-	59.27	62
Passband Variation	dB	-	0.6	1
Group delay variation(f0±23MHz)	nesc	-	12	30
Phase Linearity(f0±23MHz)	deg	-	4	8.5
Absolute Delay	usec	-	0.98	-
Ultimate Rejection	dB	50	54	-
Material Temperature coefficient	KHz/°C	-11.48		
Substrate Material	-	128LN		
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	DIP2212 (22.2x12.8x4.7mm3)			

Notes:

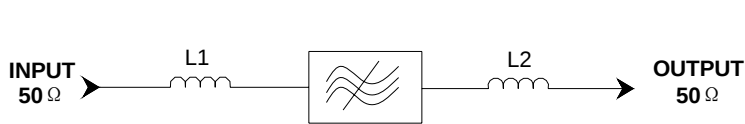
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



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

Part Number	LBN14005		
Rev. Date	2008-12-24		
Ver.	1.1	Page 1/3	

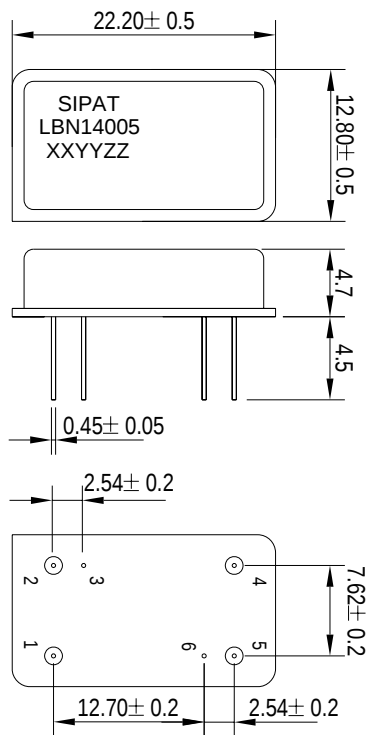
Matching Configuration



L1=82nH L2=18nH
Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 1
Output 5
Ground All Others

Marking Configuration:

- 1) SIPAT: Manufacturer Name
- 2) LBN14005: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP2212

Unit: mm



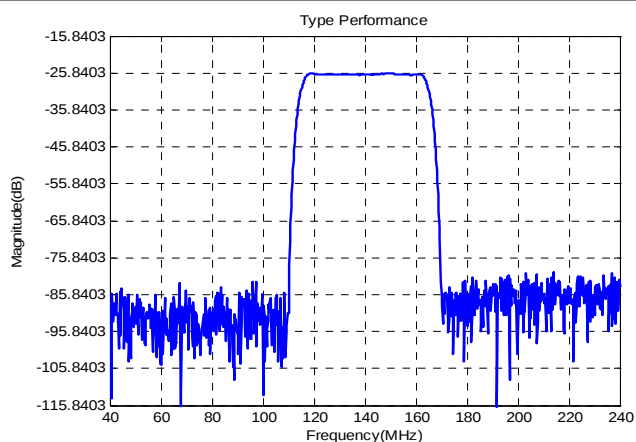
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Typical Performance

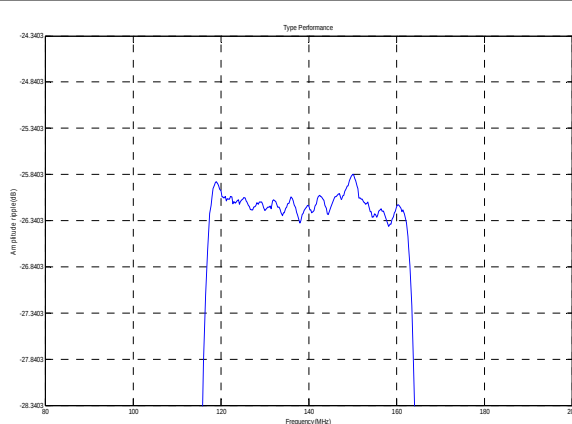
Frequency Respond



Horizontal: 20MHz/Div

Vertical: 10dB/Div

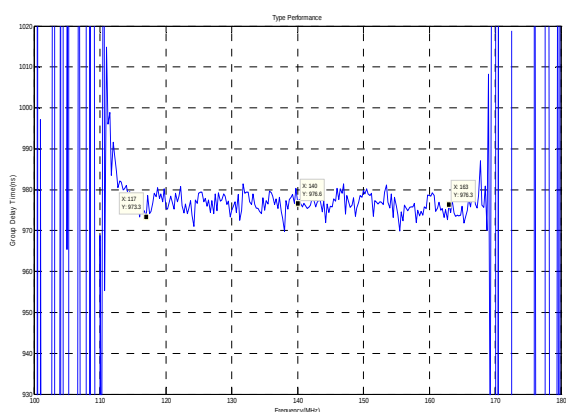
Passband Respond



Horizontal: 20MHz/Div

Vertical: 0.5dB/Div

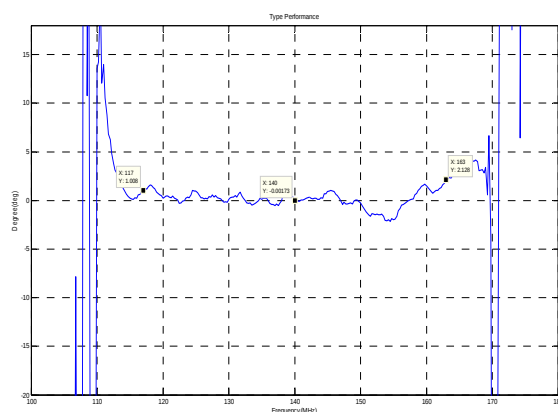
Group Delay Variation($f_0 \pm 23\text{MHz}$)



Horizontal: 10MHz/Div

Vertical: 10ns/Div

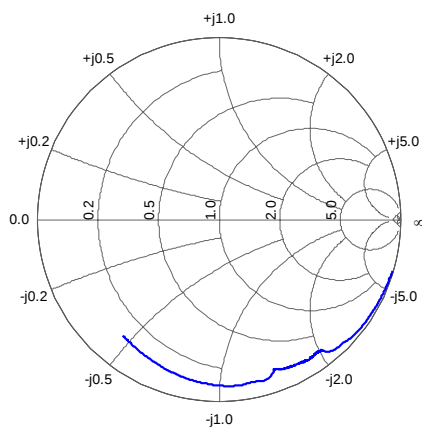
Phase Linearity($f_0 \pm 23\text{MHz}$)



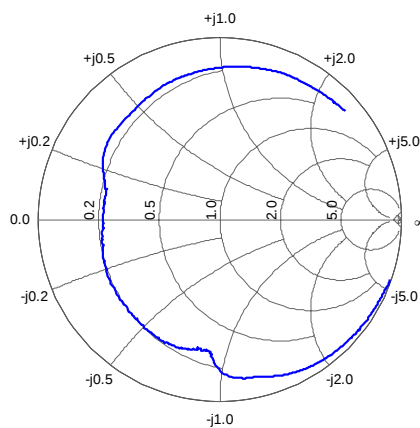
Horizontal: 10MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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