172.4MHz SAW Filter
3.2MHz Bandwidth

Part Number: LBS17206

Features

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

Specifications

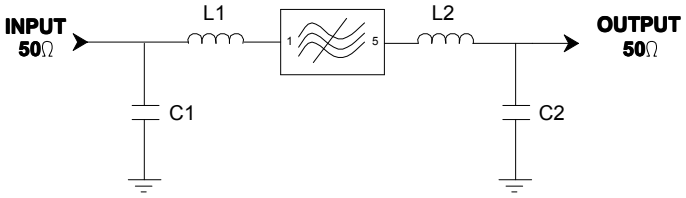
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	172.3	172.4	172.5
Insertion Loss	dB	-	23.9	27
3dB Bandwidth	MHz	3.2	3.30	-
30dB Bandwidth	MHz	-	3.93	4.0
45dB Bandwidth	MHz	-	4.12	4.4
Ultimate Rejection（f0±6.6）	dB	50	53	-
Ultimate Rejection（f0±8.15）	dB	55	56	-
Passband Variation	dB	-	0.9	1.0
Absolute delay	us	-	3.48	-
Material Temperature coefficient	KHz/°C	-	0.17	-
Substrate Material	-	QZ		
Ambient Temperature	°C	25		
Operating Temperature Range	°C	-25	-	+85
Storage Temperature Range	°C	-45	-	+105
Input Power	dBm	-	-	10
ESD Class	-	1C		
Package Size	DIP3512 (35.0x12.8x4.7)			

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.

Matching Configuration

手动测试座

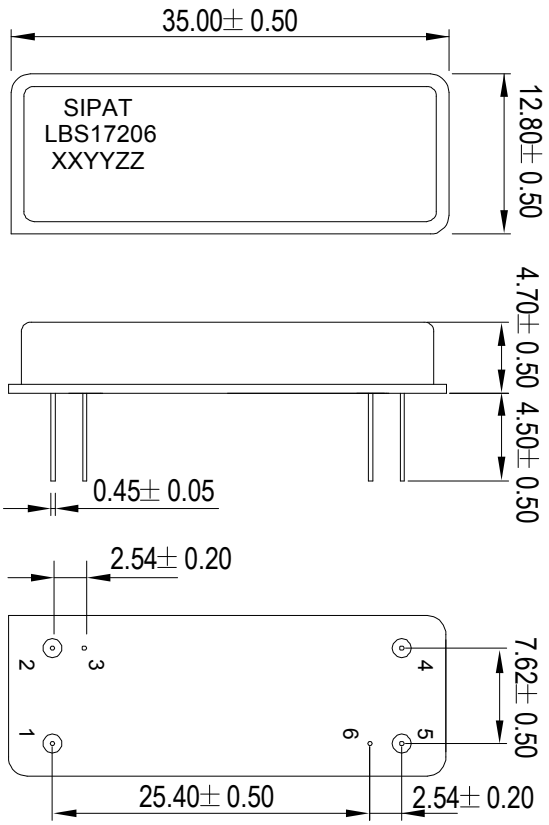


L1=68nH L2=56nH
C1=18pF C2=18pF

Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input	1
Output	5
Ground	2,3,4,6

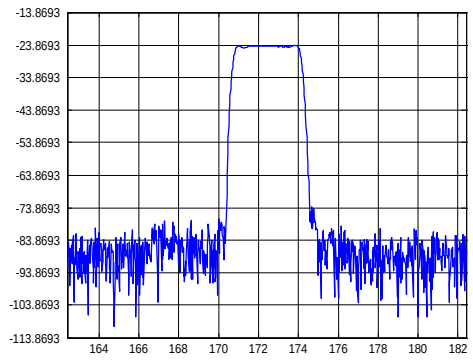
Marking Configuration:

1) SIPAT: Manufacturer Name
2) LBS17206: Part Number
3) XXYY: Date(Year/month)
4) ZZ: Identified Code

Package: DIP3512 **Unit: mm**

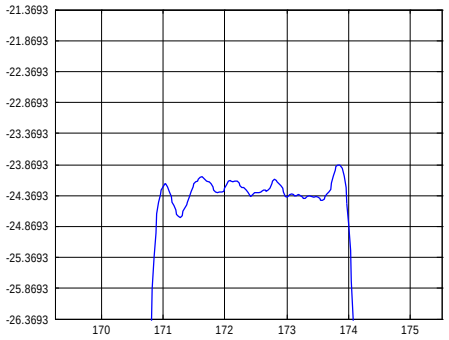
Typical Performance

Frequency Response



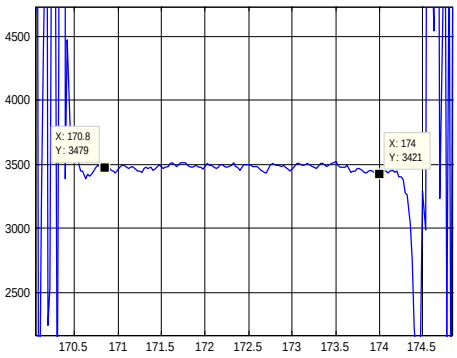
Horizontal: 2MHz/Div Vertical: 10dB/Div

Passband Response



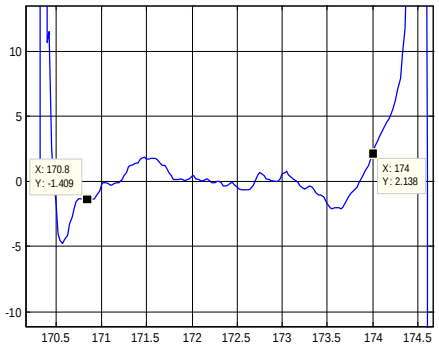
Horizontal: 1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation



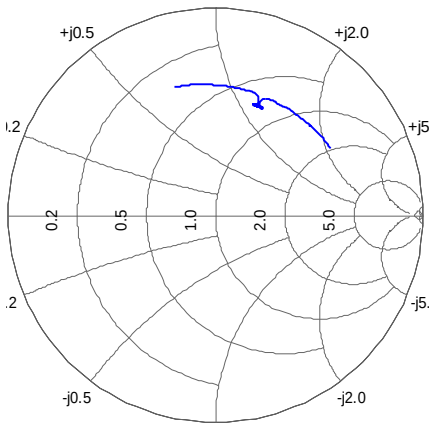
Horizontal: 0.5MHz/Div Vertical: 500ns/Div

Phase Linearity



Horizontal: 0.5MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22