



### Features


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

### Specifications

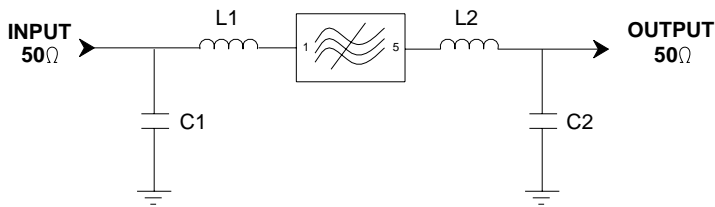
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	110.95	111.1	111.25
Insertion Loss	dB	-	22.2	30
1 dB Bandwidth	MHz	-	2.31	-
3 dB Bandwidth	MHz	2.4	2.53	-
30 dB Bandwidth	MHz	-	3.2	3.25
40 dB Bandwidth	MHz	-	3.3	-
45 dB Bandwidth	MHz	-	3.33	-
Passband Variation	dB	-	0.5	1.5
Group Delay Variation( $f_0 \pm 1.2\text{MHz}$ )	nsec	-	120	-
Absolute Delay	usec	-	3.2	-
Ultimate Rejection( $f_0 \pm 10\text{MHz}$ )	dB	55	63	-
Material Temperature coefficient	KHz/°C	0.11		
Substrate Material	-	Qz		
Ambient Temperature	°C	25		
Operating Temperature Range	°C	-25	-	+85
Storage Temperature Range	°C	-45	-	+85
DC Voltage	V	0		
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.

	<b>SIPAT Co., Ltd.</b> ( CETC No.26 Research Institute ) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBS11104	
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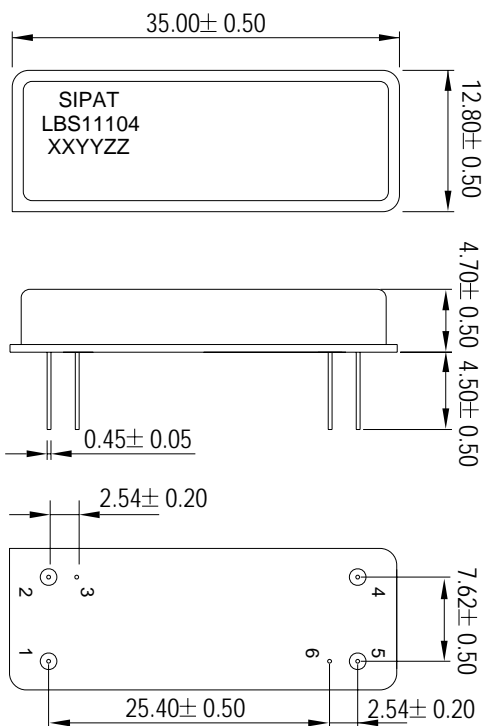
### Matching Configuration



**L1=L2=150nH**  
**C1=C2=36pF**  
**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) LBS11104: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

**Package: DIP3512**

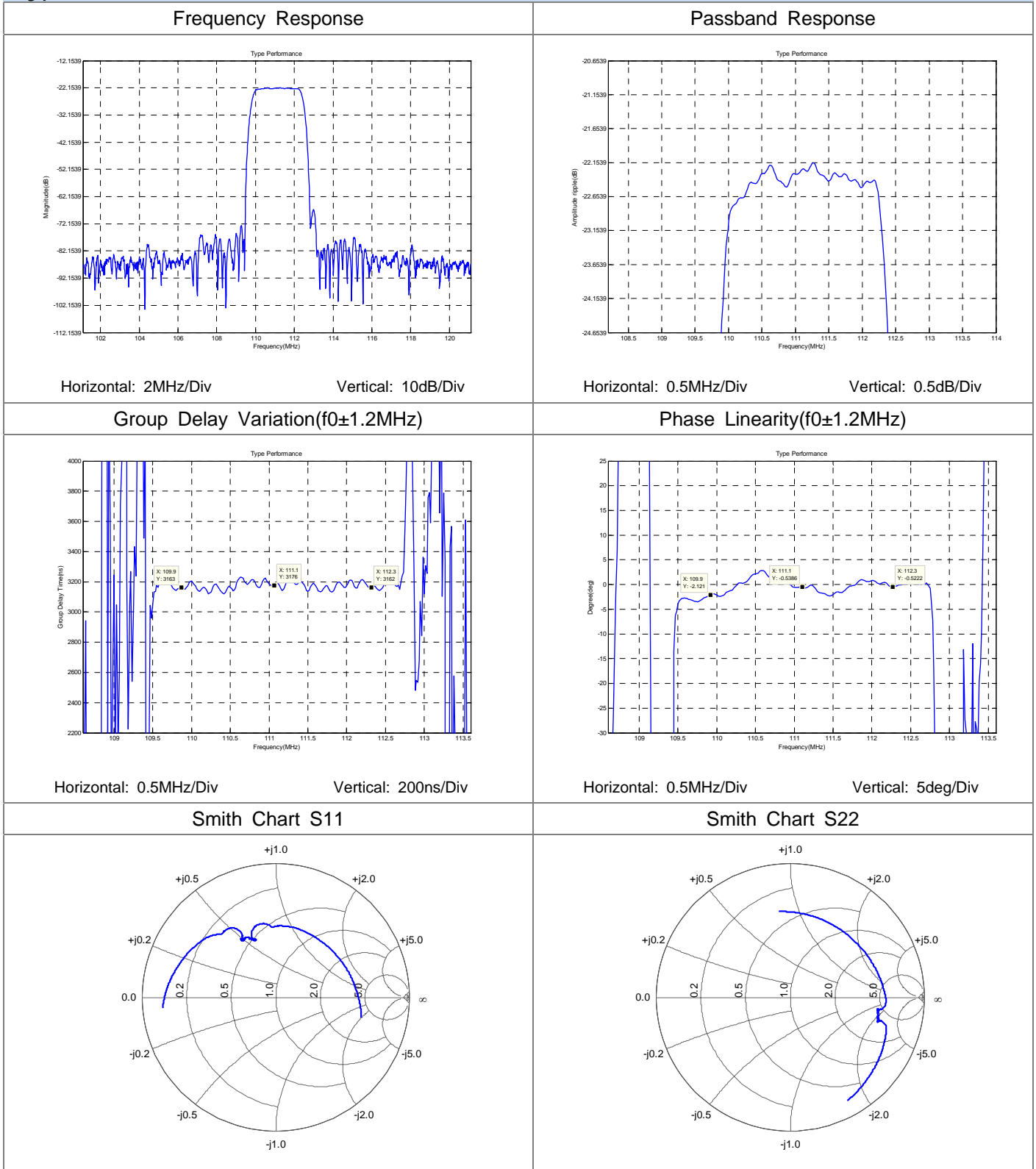
**Unit: mm**



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Typical Performance



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