



### 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	114.8	115	115.2
Insertion Loss	dB	-	26.6	29
2 dB Bandwidth	MHz	6	6.11	-
35 dB Bandwidth	MHz	-	6.78	6.8
Passband Variation	dB	-	1	2
Absolute Delay	usec	-	4.46	4.5
Ultimate Rejection( $f_0 \pm 4\text{MHz}$ )	dB	50	54	-
Material Temperature coefficient	KHz/°C	-2.07		
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	DIP3512 (35.0x12.8x4.7mm <sup>3</sup> )			

#### Notes:

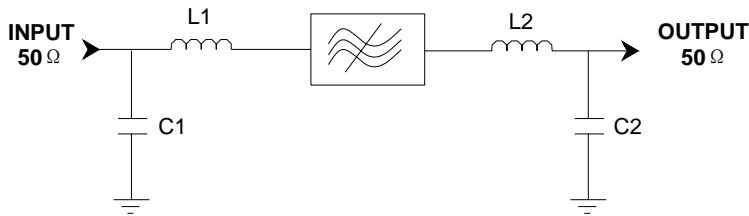
1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



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Rev. Date	2008-10-21		
Ver.	1.0	Page 1/3	

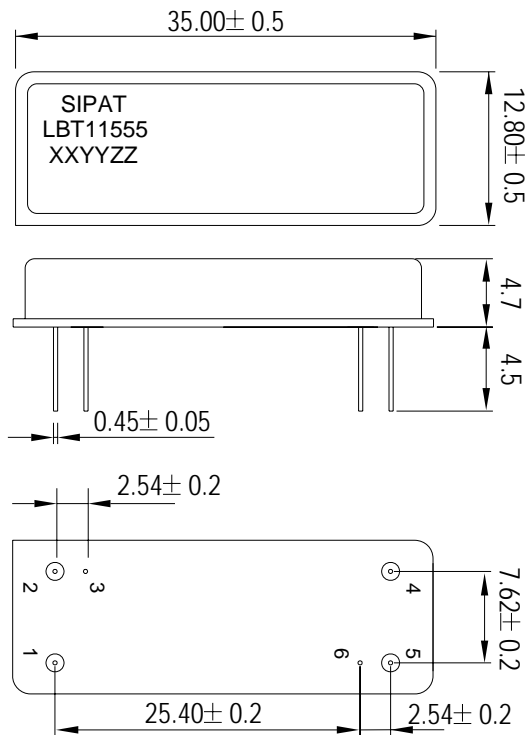
### Matching Configuration



**L1=L2=47nH**  
**C1=C2=56pF**  
**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) LBT11555: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

**Package: DIP3512**

**Unit: mm**



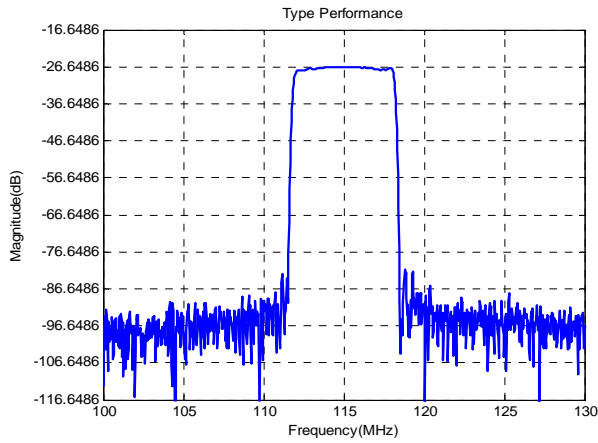
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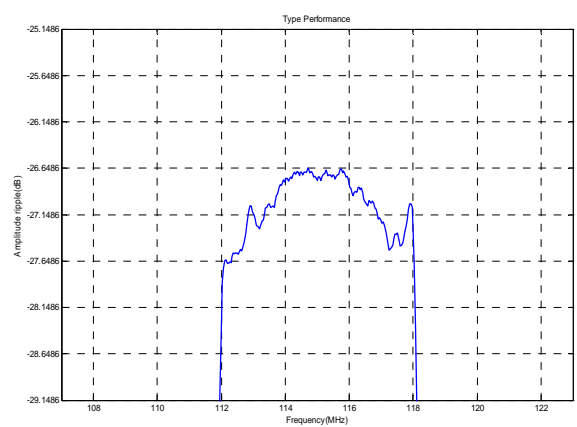
Typical Performance

Frequency Respond



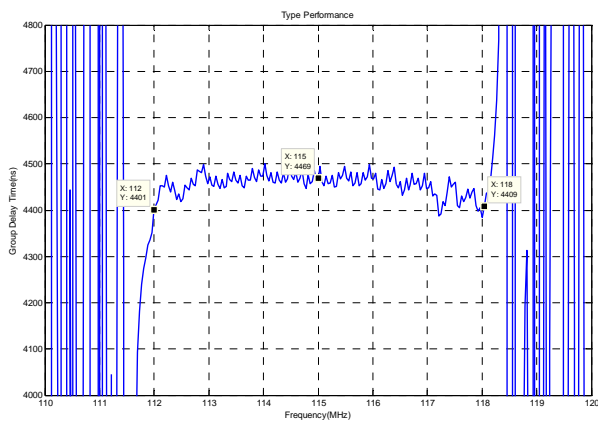
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



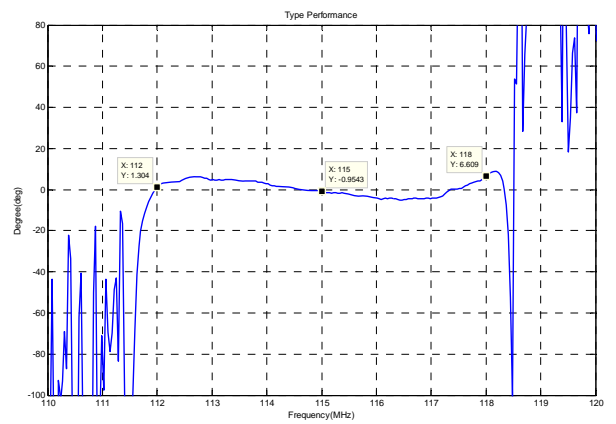
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation( $f_0 \pm 3\text{MHz}$ )



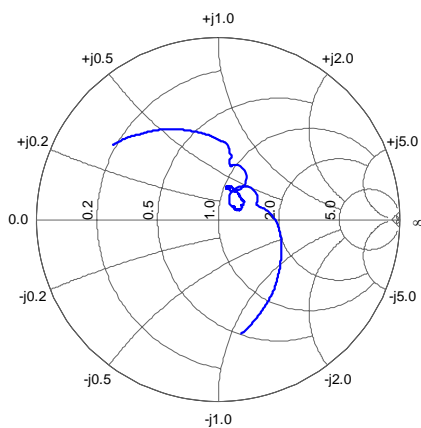
Horizontal: 1MHz/Div Vertical: 100ns/Div

Phase Linearity( $f_0 \pm 3\text{MHz}$ )

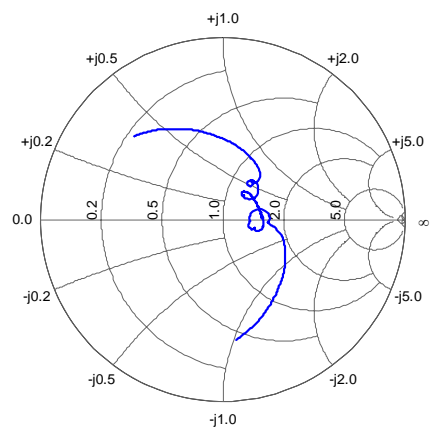


Horizontal: 1MHz/Div Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22



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