



### Features


- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Dual In-line Package
- ◇ No matching required for operation at 50Ω
- ◇ RoHS compliant (2002/95/EC), Pb-free

### Specifications

Parameter	Unit	Minimum	Typical	Maximum
<i>Center Frequency</i>	MHz	-	137.5	-
<i>Insertion Loss</i>	dB	-	26	28
<i>1 dB Bandwidth</i>	MHz	5	5.31	-
<i>25 dB Bandwidth</i>	MHz	-	6.85	7
<i>30 dB Bandwidth</i>	MHz	-	6.96	8
<i>40 dB Bandwidth</i>	MHz	-	7.13	8.5
<i>Passband Variation</i>	dB	-	0.4	1
<i>Absolute Delay</i>	usec	-	1.93	-
<i>Ultimate Rejection</i>	dB	45	52	-
<i>Center Frequency</i>	MHz	-	158.75	-
<i>Insertion Loss</i>	dB	-	26	28
<i>1 dB Bandwidth</i>	MHz	12.5	12.63	-
<i>25 dB Bandwidth</i>	MHz	-	14.32	14.5
<i>30 dB Bandwidth</i>	MHz	-	14.45	15.5
<i>40 dB Bandwidth</i>	MHz	-	14.64	16
<i>Passband Variation</i>	dB	-	0.7	1
<i>Absolute Delay</i>	usec	-	1.93	-
<i>Ultimate Rejection</i>	dB	45	52	-
<i>Material Temperature coefficient</i>	KHz/°C	-14.1		
<i>Substrate Material</i>	-	YZ LN		
<i>Ambient Temperature</i>	°C	25		
<i>Operating Temperature Range</i>	°C	-40	-	+85
<i>Storage Temperature Range</i>	°C	-45	-	+105
<i>DC Voltage</i>	V	0		
<i>Input Power</i>	dBm	-	-	10
<i>ESD Class</i>	-	1A		
<i>Package Size</i>	DIP3512 (35.0x12.8x4.7mm3)			

#### Notes:

1. All specifications are based on the test circuit shown;

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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.

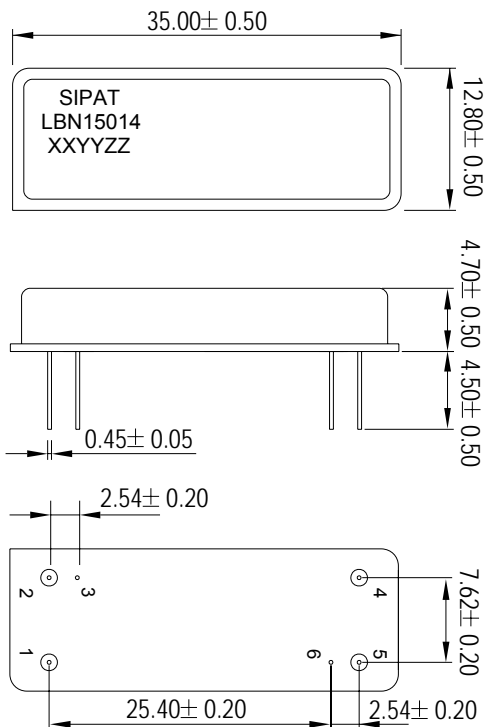
### Matching Configuration



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) LBN15014: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



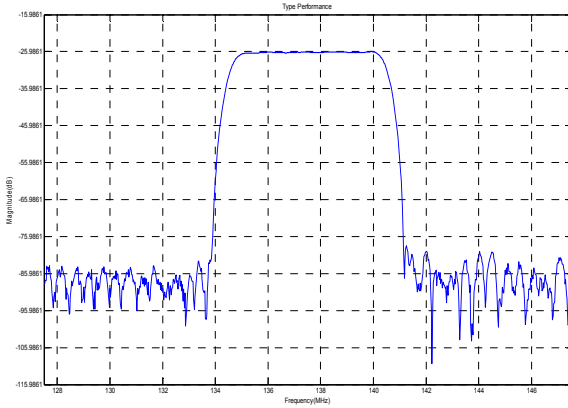
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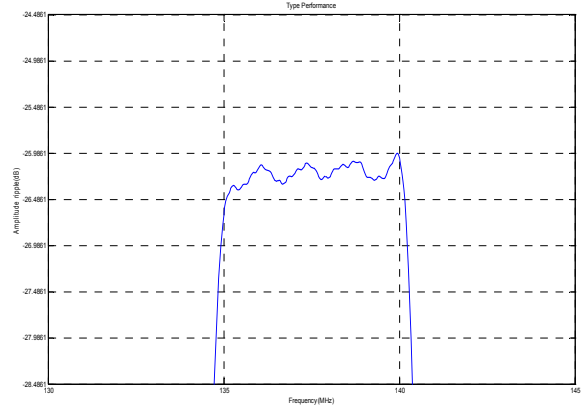
Typical Performance(137.5MHz)

Frequency Respond



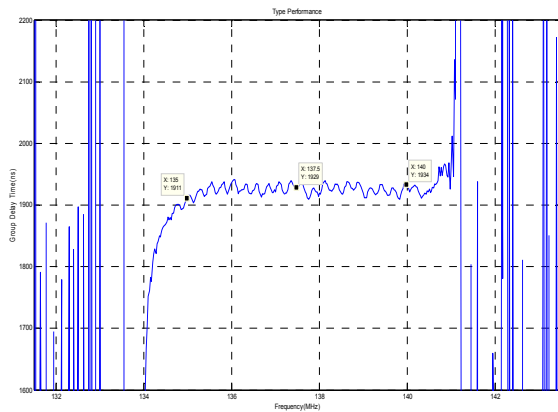
Horizontal: 2MHz/Div Vertical: 10dB/Div

Passband Respond



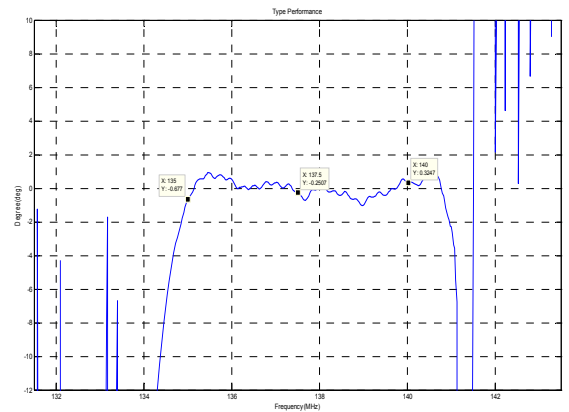
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation( $f_0 \pm 2.5$ MHz)



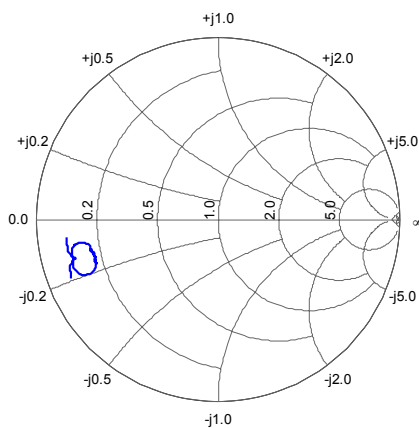
Horizontal: 2MHz/Div Vertical: 100ns/Div

Phase Linearity( $f_0 \pm 2.5$ MHz)

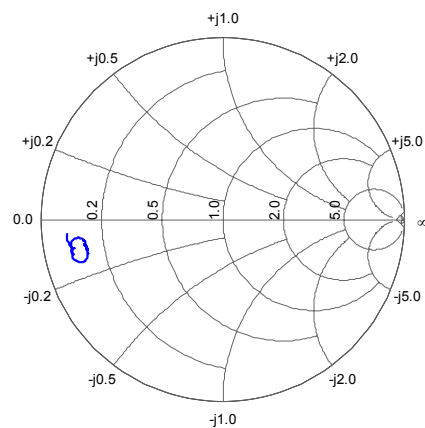


Horizontal: 2MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



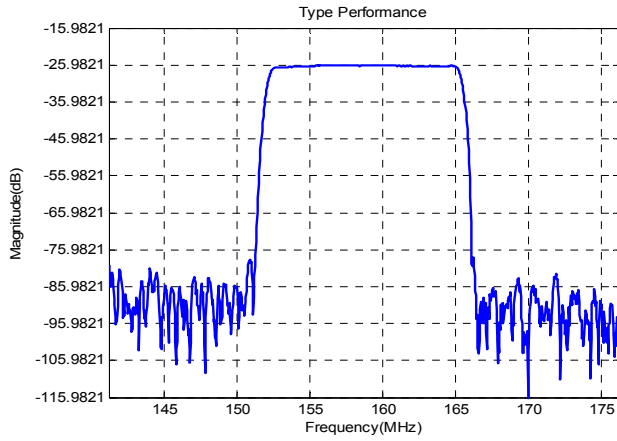
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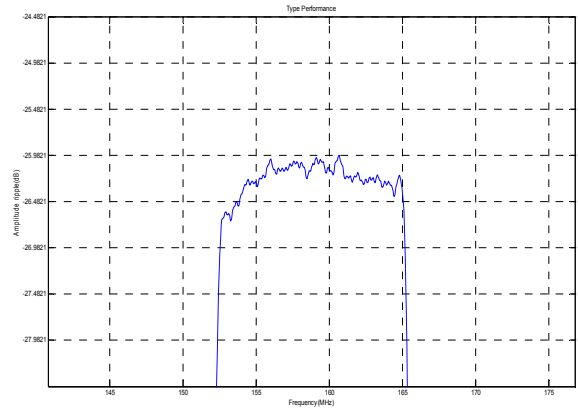
Typical Performance(158.75MHz)

Frequency Respond



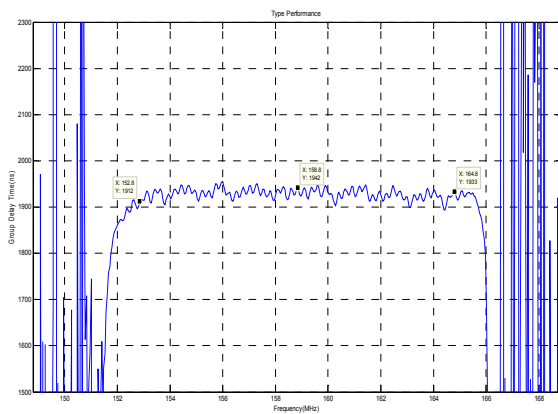
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



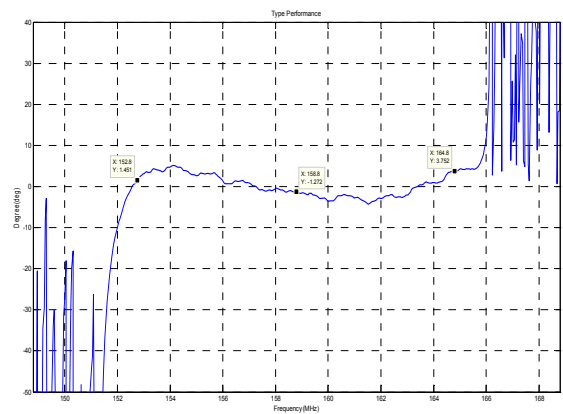
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation( $f_0 \pm 6$ MHz)



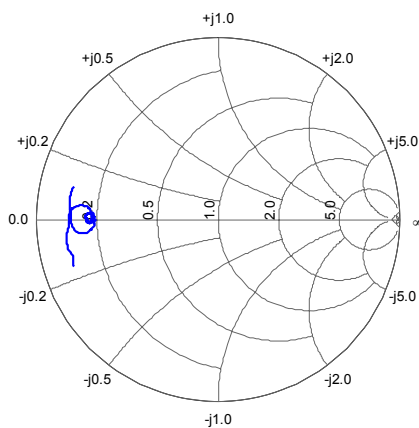
Horizontal: 2MHz/Div Vertical: 100ns/Div

Phase Linearity( $f_0 \pm 6$ MHz)

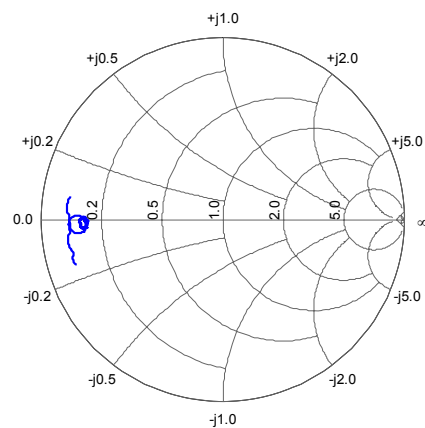


Horizontal: 2MHz/Div Vertical: 10deg/Div

Smith Chart S11



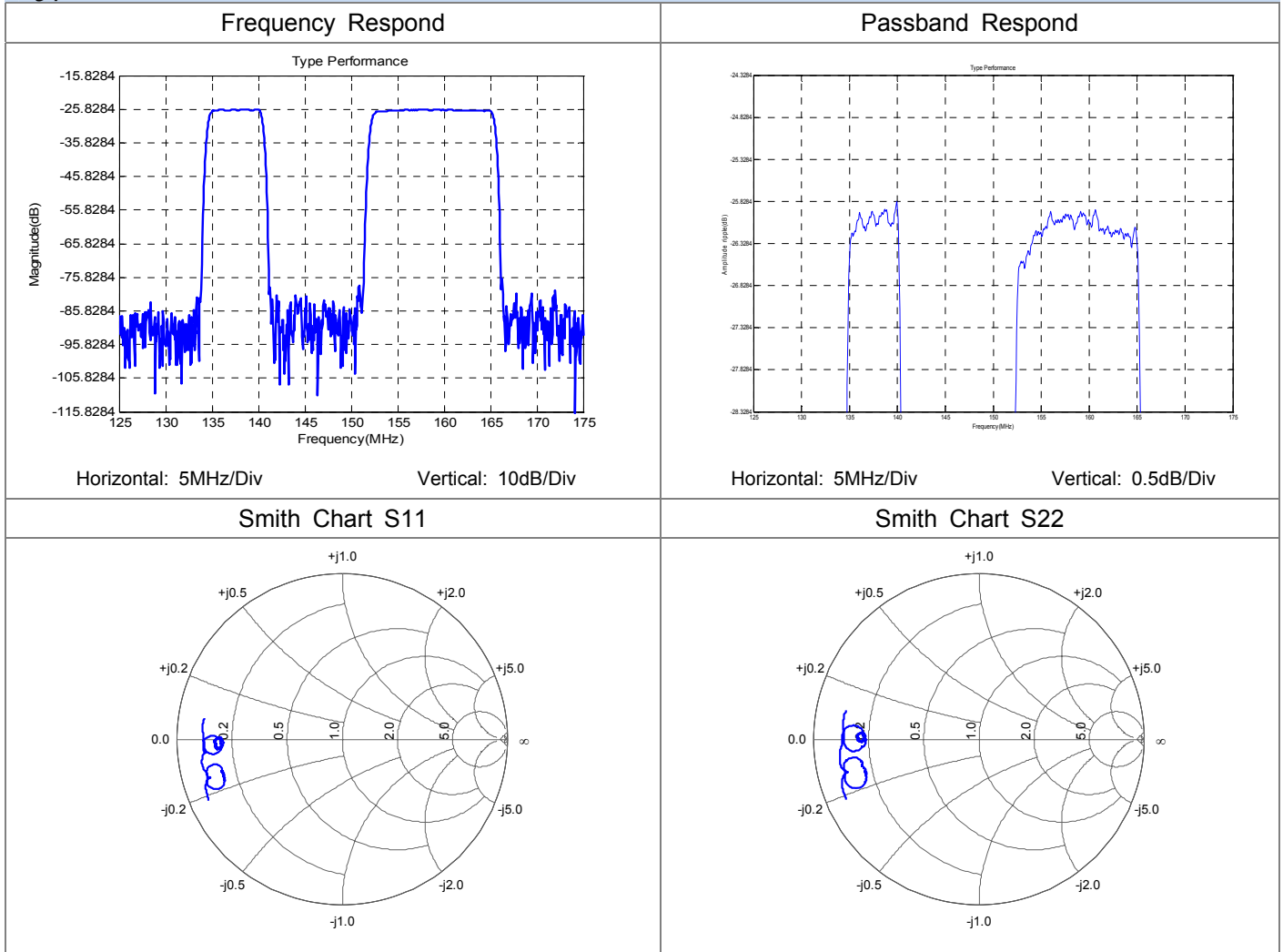
Smith Chart S22



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*Typical Performance(137.5&158.75MHz)*



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