



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
Center Frequency	MHz	-	137.5	-
Insertion Loss	dB	-	26	28
1 dB Bandwidth	MHz	5	5.31	-
25 dB Bandwidth	MHz	-	6.85	7
30 dB Bandwidth	MHz	-	6.96	8
40 dB Bandwidth	MHz	-	7.13	8.5
Passband Variation	dB	-	0.4	1
Absolute Delay	usec	-	1.93	-
Ultimate Rejection	dB	45	52	-
Center Frequency	MHz	-	158.75	-
Insertion Loss	dB	-	26	28
1 dB Bandwidth	MHz	12.5	12.63	-
25 dB Bandwidth	MHz	-	14.32	14.5
30 dB Bandwidth	MHz	-	14.45	15.5
40 dB Bandwidth	MHz	-	14.64	16
Passband Variation	dB	-	0.7	1
Absolute Delay	usec	-	1.93	-
Ultimate Rejection	dB	45	52	-
Material Temperature coefficient	KHz/°C	-14.1		
Substrate Material	-	YZ LN		
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 (35.0x12.8x4.7mm3)		

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.

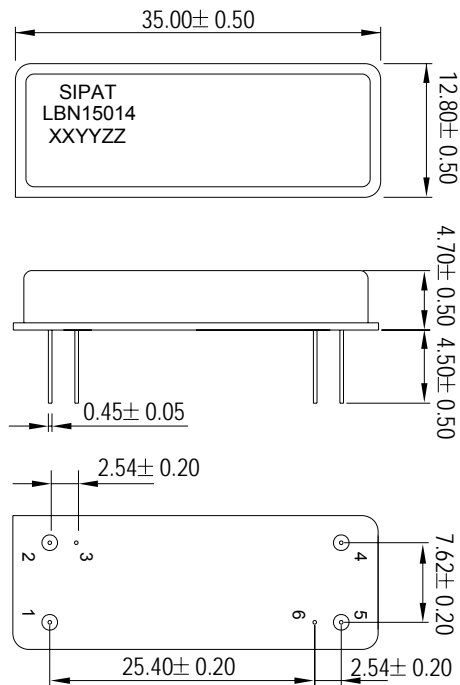
Matching Configuration



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) XYYZ: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



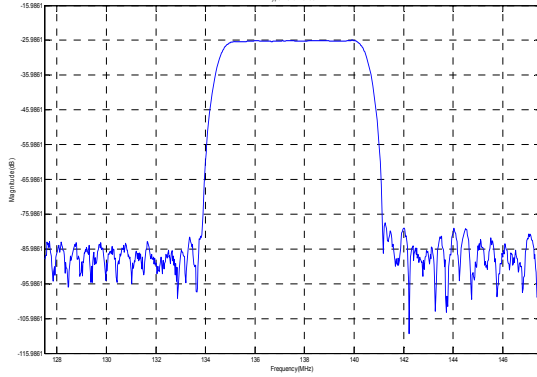
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Typical Performance(137.5MHz)

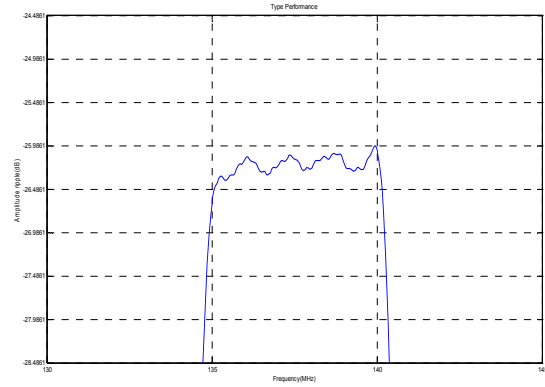
Frequency Respond



Horizontal: 2MHz/Div

Vertical: 10dB/Div

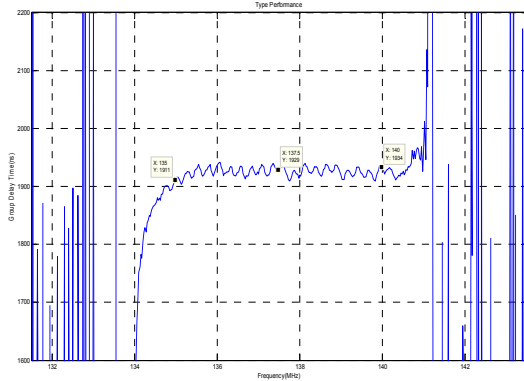
Passband Respond



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

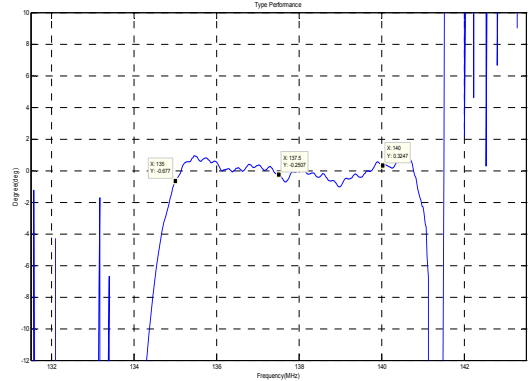
Group Delay Variation($f_0 \pm 2.5$ MHz)



Horizontal: 2MHz/Div

Vertical: 100ns/Div

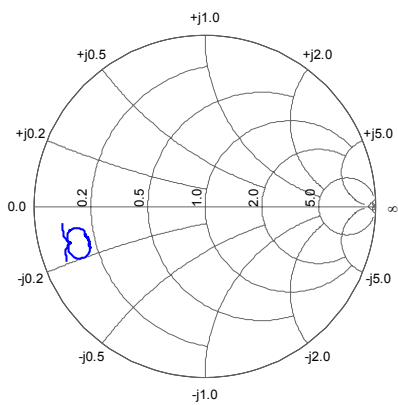
Phase Linearity($f_0 \pm 2.5$ MHz)



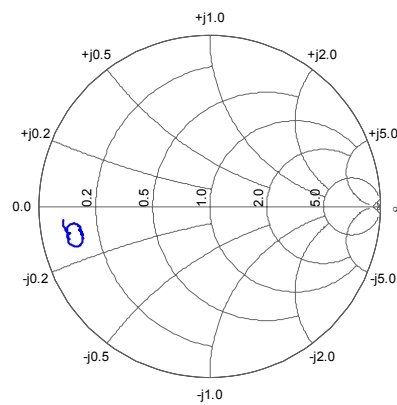
Horizontal: 2MHz/Div

Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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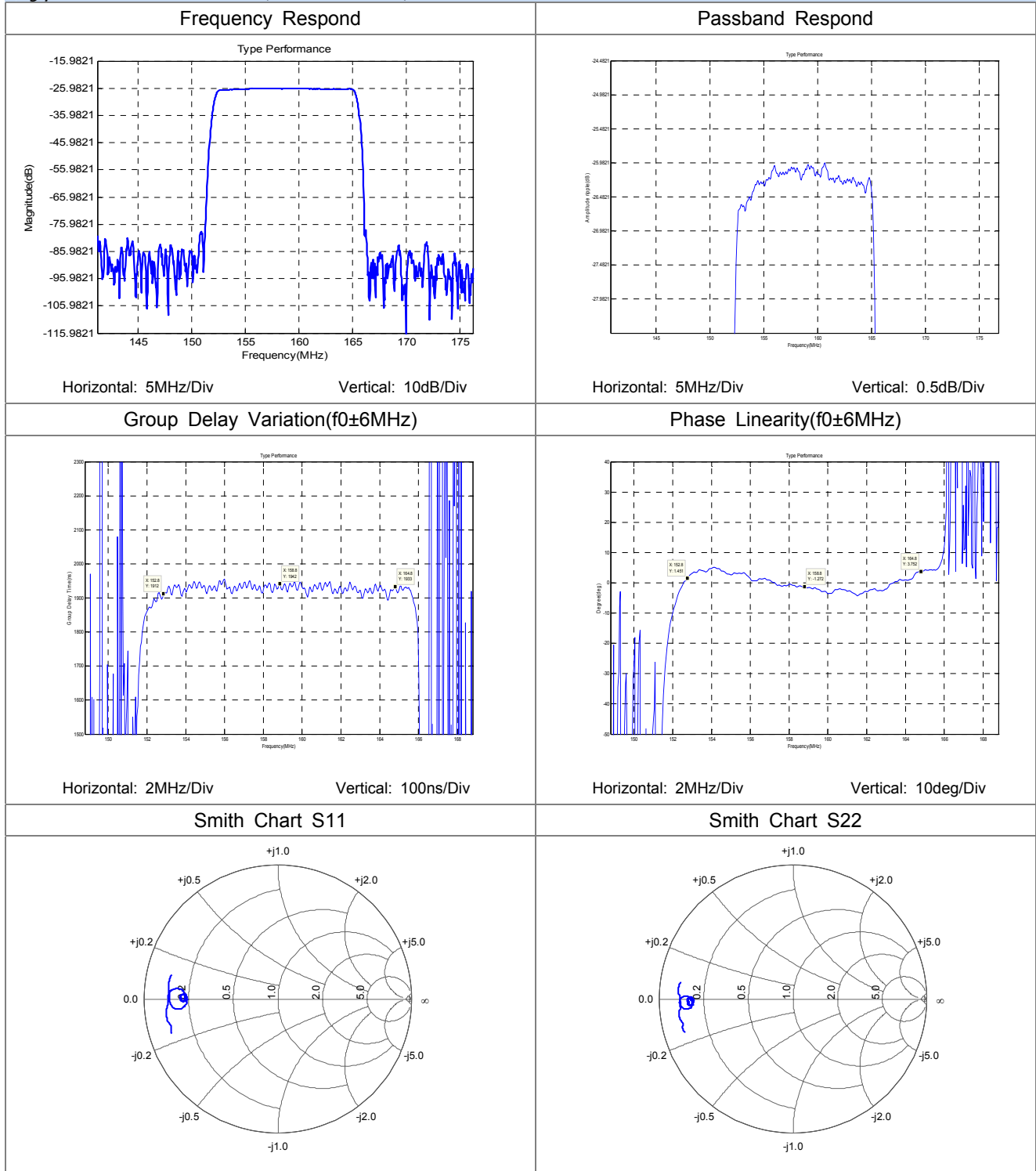
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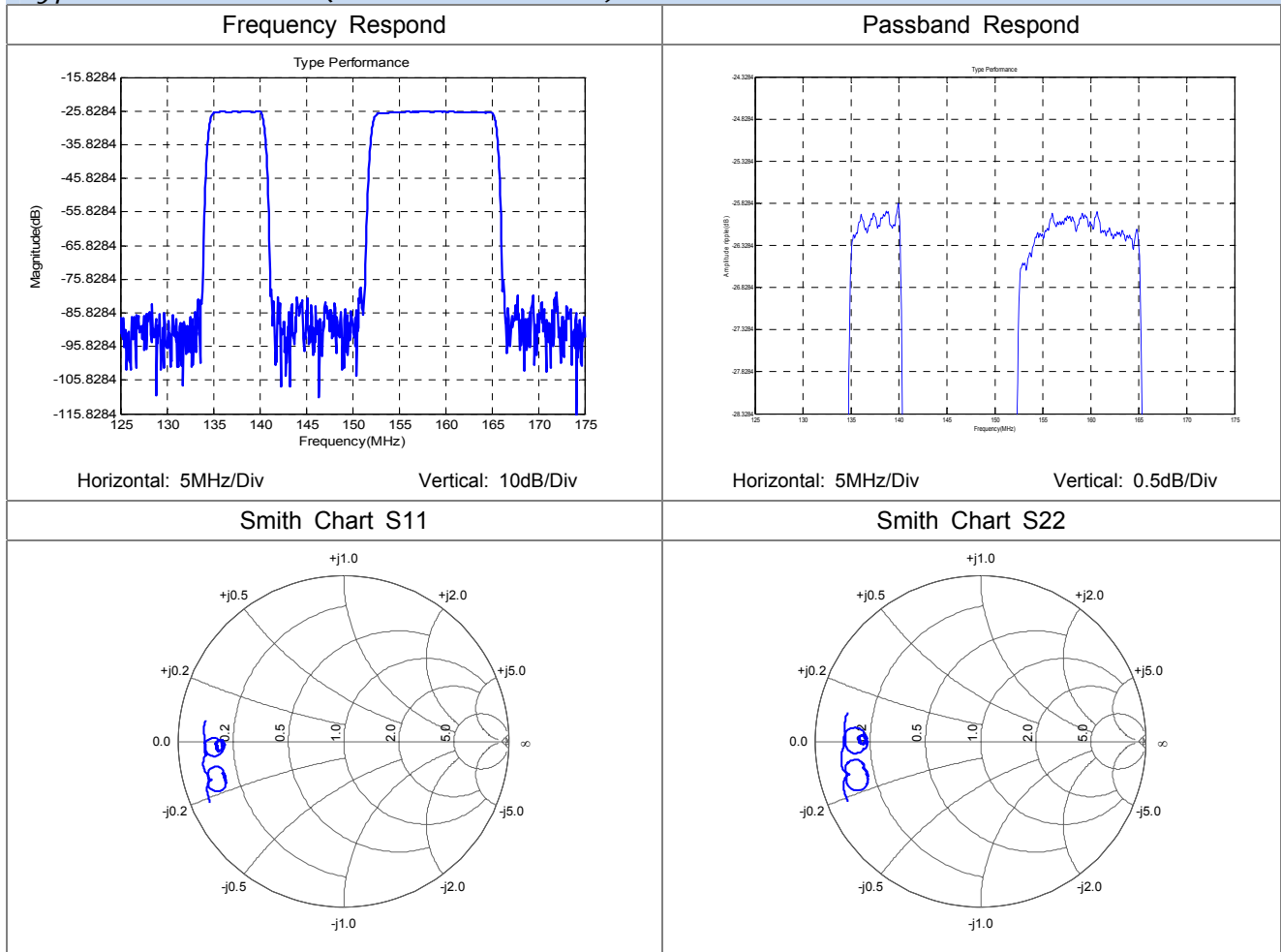
Typical Performance(158.75MHz)



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Typical Performance(137.5&158.75MHz)



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