

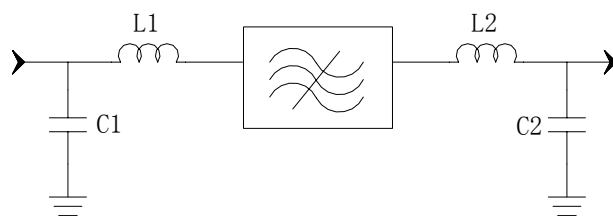
### Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	113.975	114	114.025
Insertion Loss	dB	-	12.4	13
Ripple within $f_0 \pm 150\text{kHz}$	dB	-	0.6	1
Rejection outside at $f_0 \pm 500\text{kHz}$	dB	20	25	-
Ultimate Rejection ( $f_0 \pm 3\text{MHz}$ )	dB	40	45	-
Group delay Variation( $f_0 \pm 150\text{kHz}$ )	nsec	-	70	120
Passband Variation	dB	-	0.5	1
Absolute Delay	usec	-	2.4	-
SWR (S11)	-	-	1.6	-
SWR (S22)	-	-	1.3	-
Substrate Material	-	Quartz		
Ambient Temperature	°C	25		
Package Size	DIP2012 (20x12.5x4mm <sup>3</sup> )			

#### Notes:


1. All specifications are based on the test circuit shown
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over 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

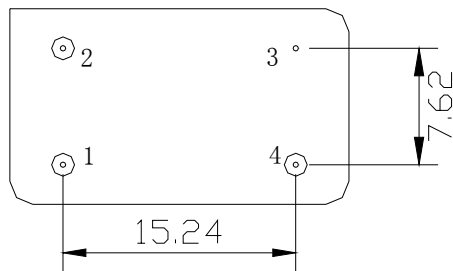
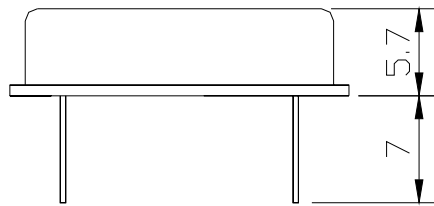
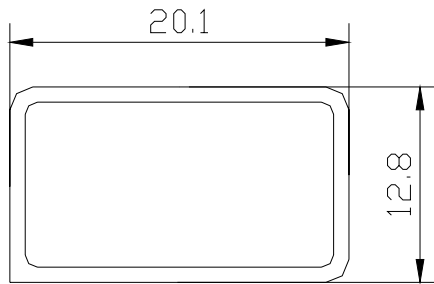


**L1=100+47nH L2=82nH**  
**C1=47pF C2=47pF**  
**Source/Load Impedance=50 ohm**


Notes - Component values may change depending on board layout.

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		Rev. Date	2005-7-25	
		Rev.	1.01	Page

*Package Dimension*

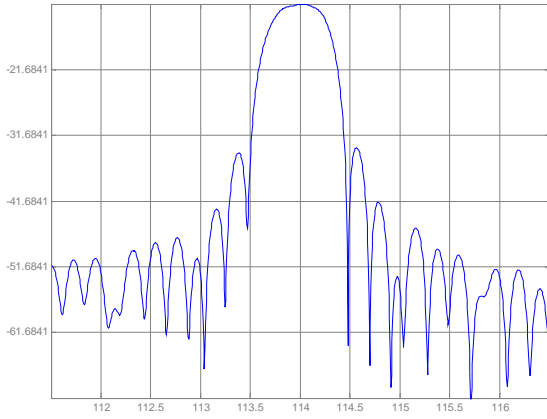


**Input: 2**  
**Output: 4**  
**Grounded: 3**

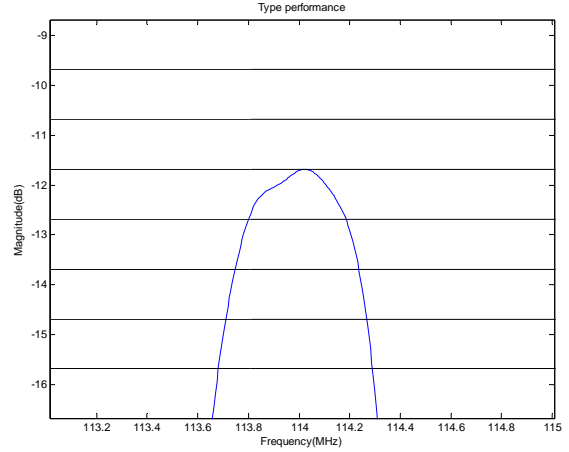
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*Typical Performance*

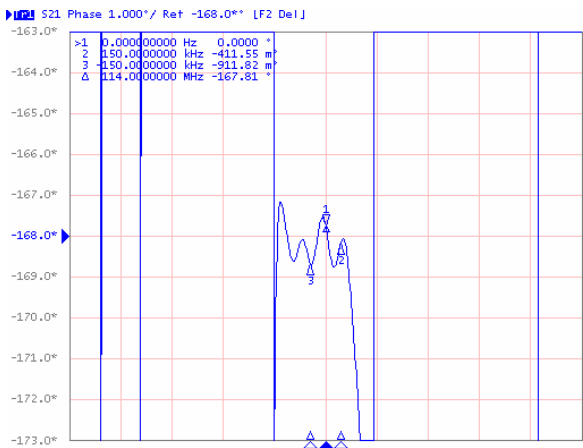
Frequency Respond



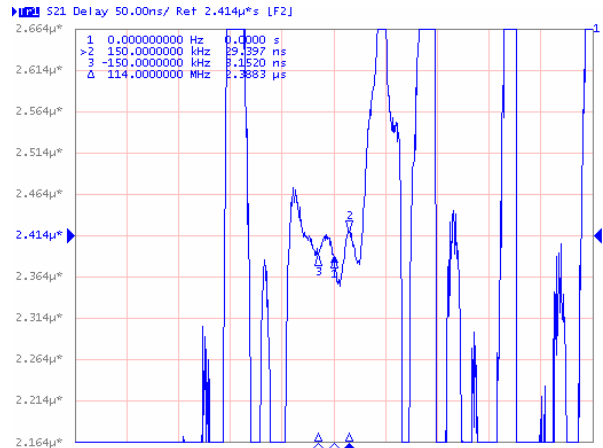
Passband Respond



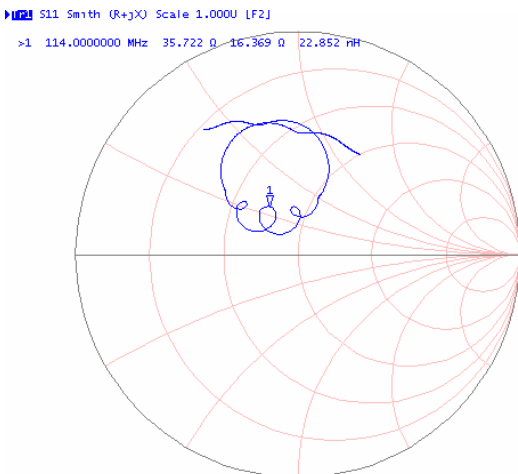
Phase Linearity ( $f_0 \pm 150\text{KHz}$ )



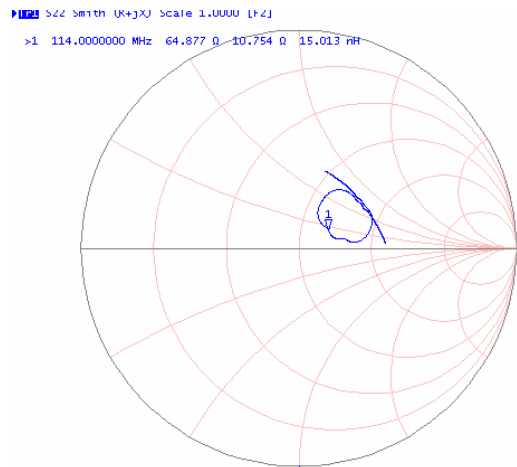
Group delay variation ( $f_0 \pm 150\text{KHz}$ )



Smith Chart S11



Smith Chart S22



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Page 3/3