

### Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	107.7	107.8	107.9
Insertion Loss	dB	-	24	27
1 dB Bandwidth	MHz	-	1.48	-
3 dB Bandwidth	MHz	1.55	1.65	1.7
35 dB Bandwidth	MHz	-	2.27	2.4
40 dB Bandwidth	MHz	-	2.31	-
45 dB Bandwidth	MHz	-	2.36	2.8
50 dB Bandwidth	MHz	-	2.42	3.6
55 dB Bandwidth	MHz	-	2.67	11.6
Passband Variation	dB	-	0.4	1
Absolute Delay	usec	-	3.9	4
Ultimate Rejection( $f_0 \pm 15\text{MHz}$ )	dB	55	56	-
Material Temperature coefficient	KHz/°C	0.1078		
Ambient Temperature	°C	25		
Package Size	DIP3512 (35.0x12.8x4.7mm <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



$$L1=L2=86\text{nH}$$

Source/Load Impedance=50 ohm

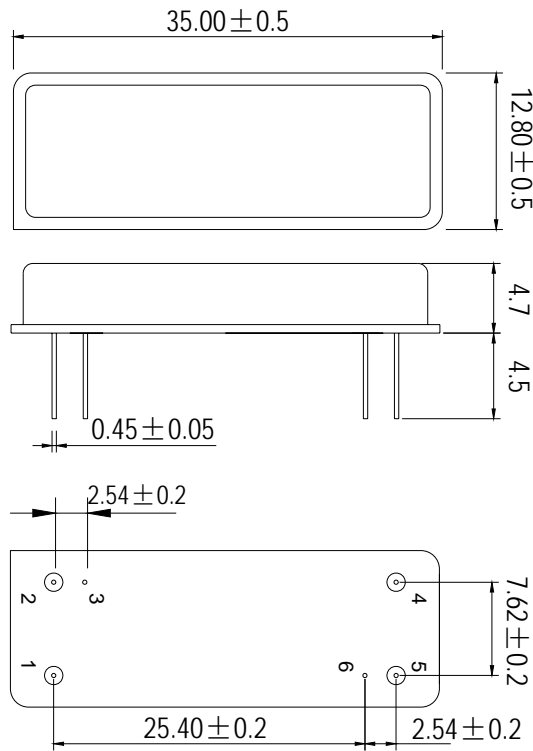
Notes - Component values may change depending on board layout.



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*Package Dimension*



Input	1
Output	5
Ground	2,3,4,6

**Package: DIP3512**

**Unit: mm**

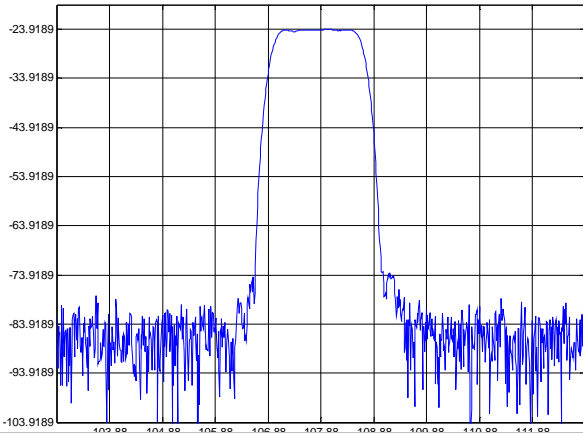


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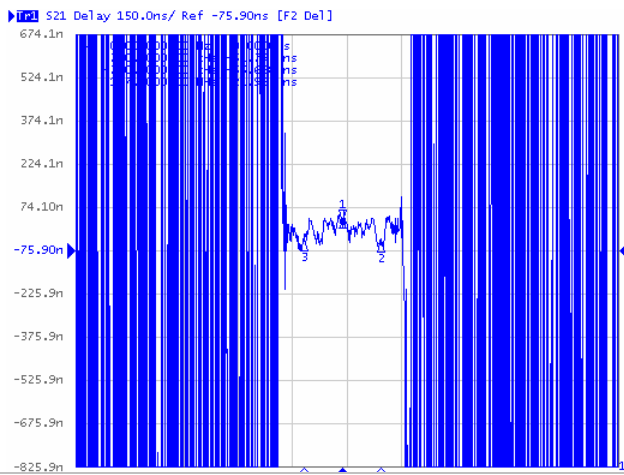
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Typical Performance

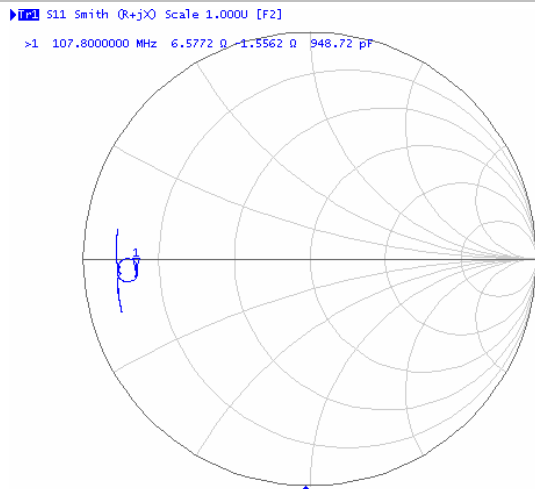
Frequency Respond



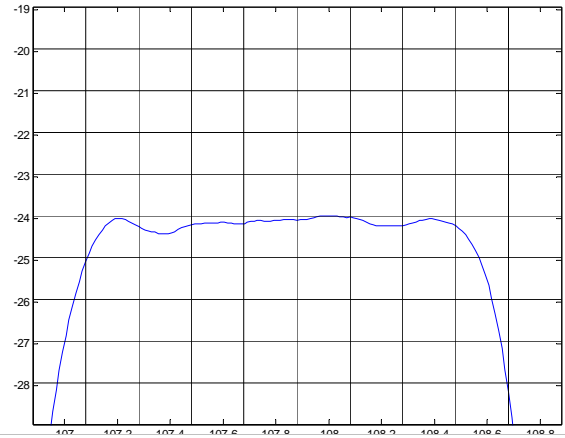
Group Delay Variation( $f_0 \pm \text{Hz}$ )



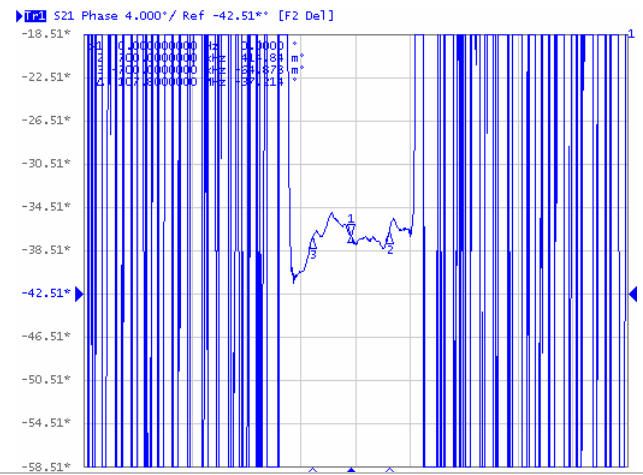
Smith Chart S11



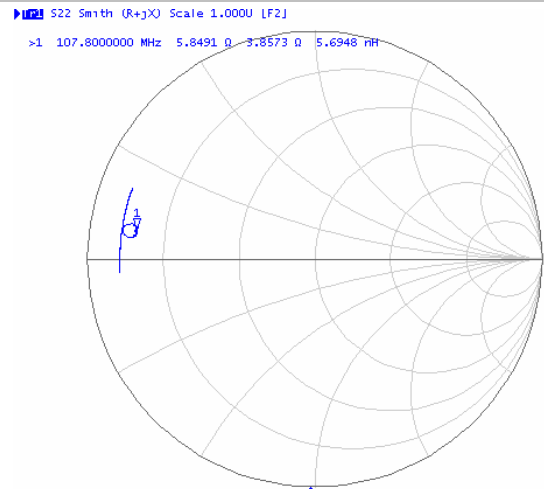
Passband Respond



Phase Linearity( $f_0 \pm \text{Hz}$ )



Smith Chart S22



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