

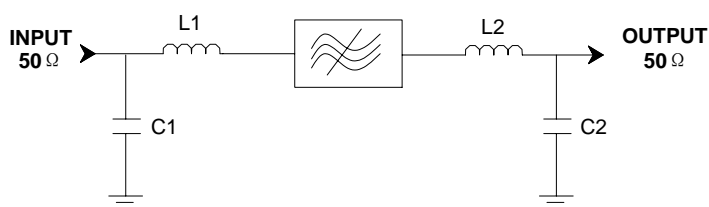
## Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.7	140	140.3
Insertion Loss	dB	-	9	13
1 dB Bandwidth	MHz	15	16	-
3 dB Bandwidth	MHz	16	16.9	-
35 dB Bandwidth	MHz	-	20.5	21.5
40 dB Bandwidth	MHz	-	21.2	-
Passband Ripple(80% of 3dB BW)	dB	-	0.5	1
Phase Linearity(80% of 3dB BW)	deg	-	10	14
Delay Variation(80% of 3dB BW)	nsec	-	100	160
Absolute Delay	usec	-	1.02	-
Material Temperature coefficient	KHz/°C	-13.16		
Ambient Temperature	°C	25		
Package Size	SMP-53 (13.3*6.5mm Nominal Footprint)			

### 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

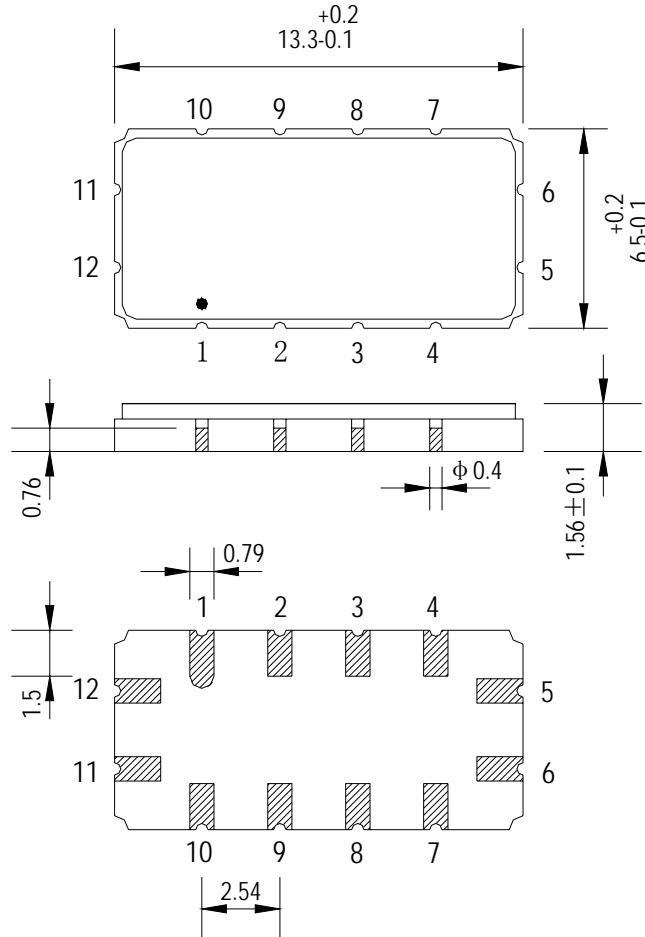


**L1=100nH L2=120nH**  
**C1=36pF C2=33pF**  
**Source/Load Impedance=50 ohm**

Notes - Component values may change depending on board layout.

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Package Dimension




Package: SMD13.3\*6.5C

Unit: mm

Input 11  
Output 5  
Ground 1,2,3,4,6,7,8,9,10,12

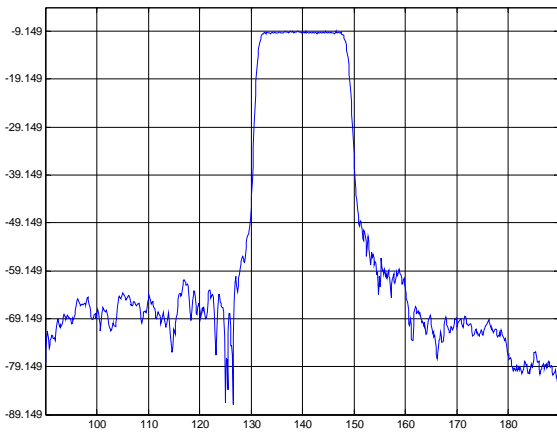
Package: SMD13.3\*6.5

Unit: mm

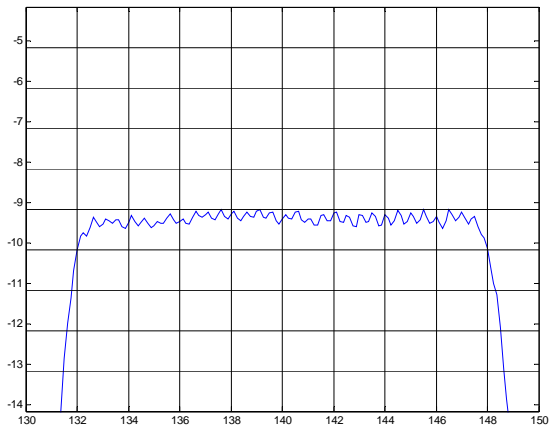
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Typical Performance

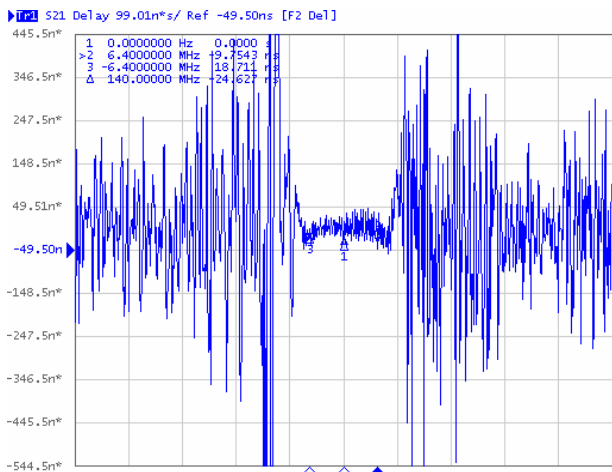
Frequency Respond



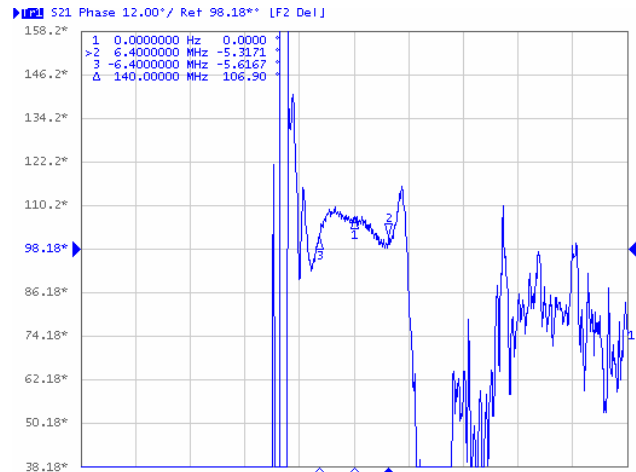
Passband Respond



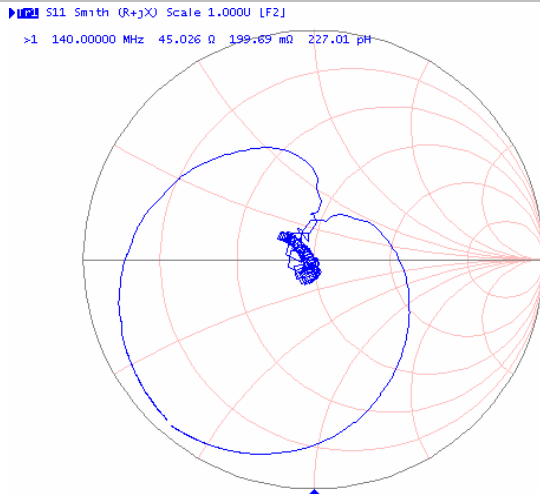
Group Delay Variation( $f_0 \pm 6.4$  MHz)



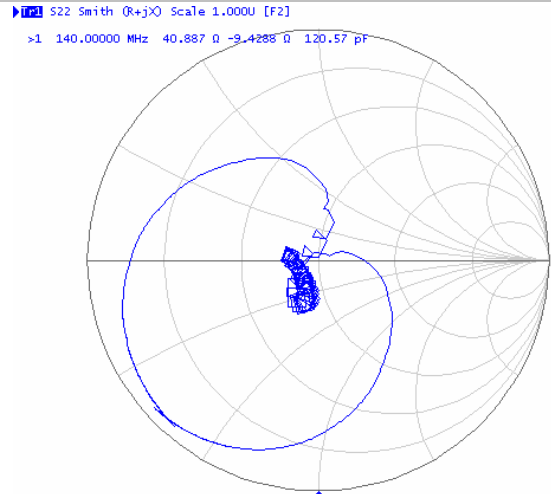
Phase Linearity( $f_0 \pm 6.4$  MHz)



Smith Chart S11



Smith Chart S22



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