

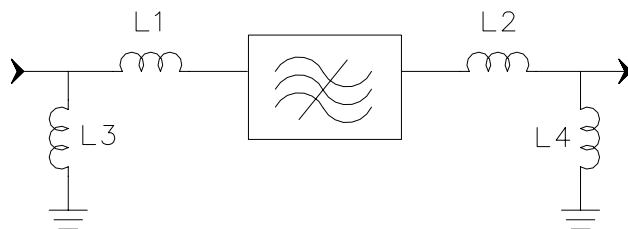
Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	69.88	70	70.12
Insertion Loss	dB	—	12.5	14
1 dB Bandwidth	MHz	2	2.05	—
3 dB Bandwidth	MHz	2.5	2.6	—
40 dB Bandwidth	MHz	—	4.67	5.5
Passband Variation	dB	—	0.5	1.0
Group Delay Variation($f_0 \pm 0.7\text{MHz}$)	nsec	—	150	400
Phase Linearity ($f_0 \pm 0.7\text{MHz}$)	deg	—	12	—
Absolute Delay	usec	—	1.37	—
Ultimate Rejection	dB	40	45	—
Material Temperature coefficient	KHz/°C	-1.26		
Ambient Temperature	°C	25		
Package Size	SMP-53C (13.3x6.5mm 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




$$L1 = 120\text{nH} \quad L2 = 100\text{nH}$$

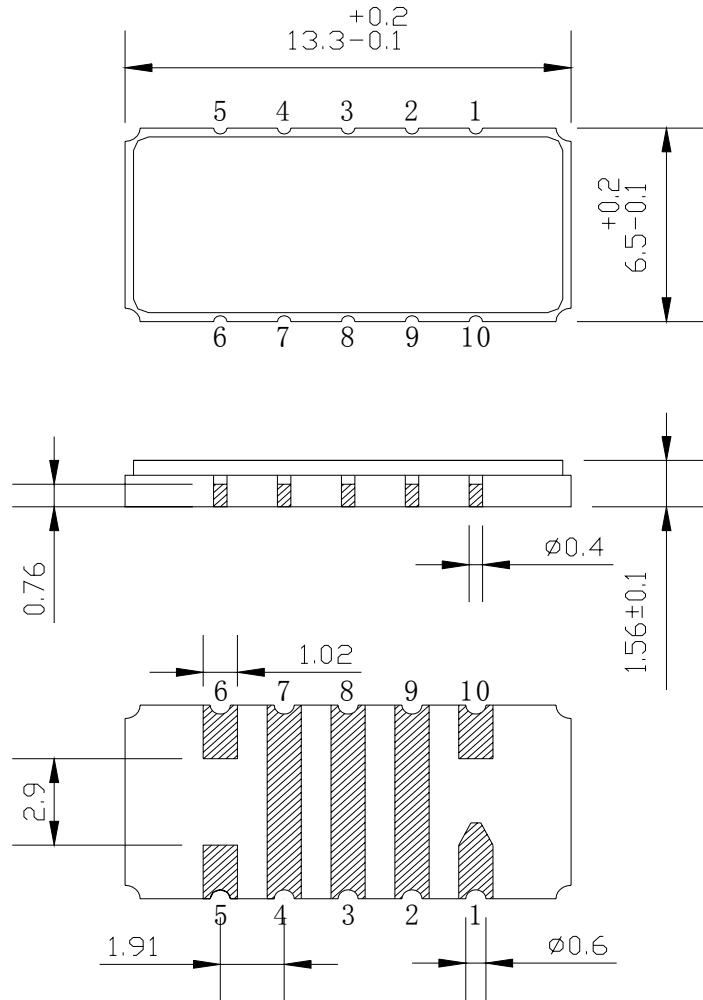
$$L3 = 68\text{nH} \quad L4 = 120\text{nH}$$

Source/Load Impedance=50 ohm


Notes - Component values may change depending on board layout.

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Package Dimension

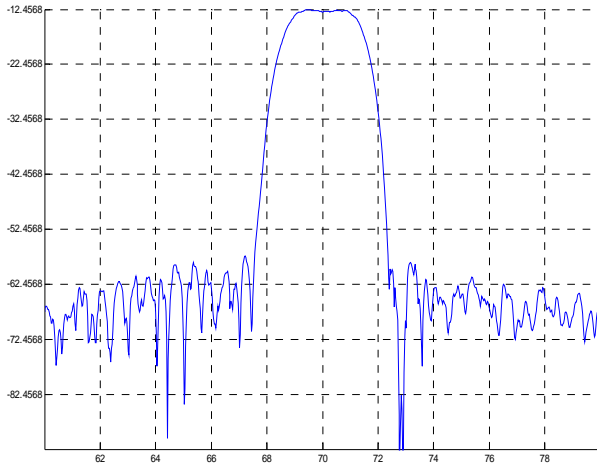


Input:10
Output:5

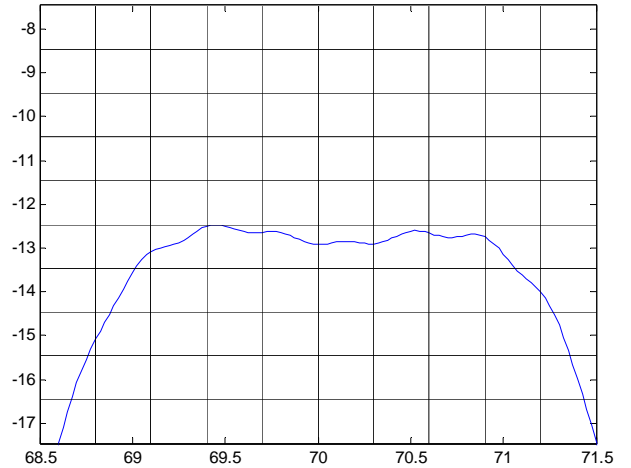
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Typical Performance

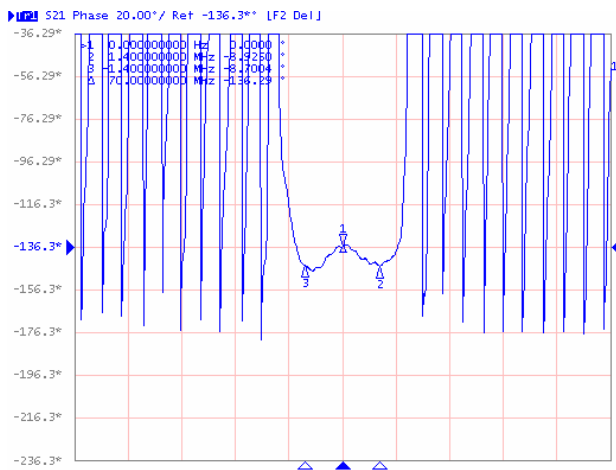
Frequency Response



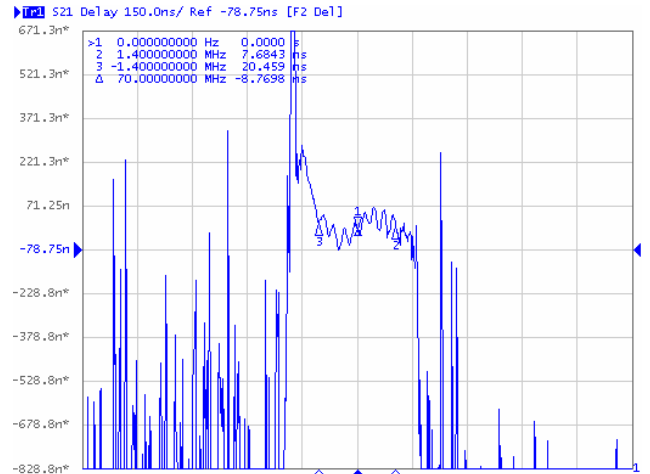
Passband Response



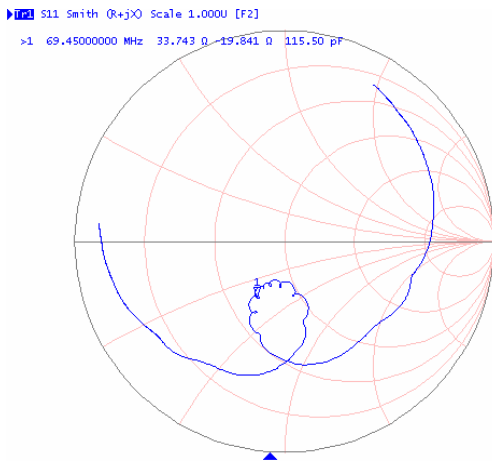
Phase Linearity($f_0 \pm 1.4\text{MHz}$)



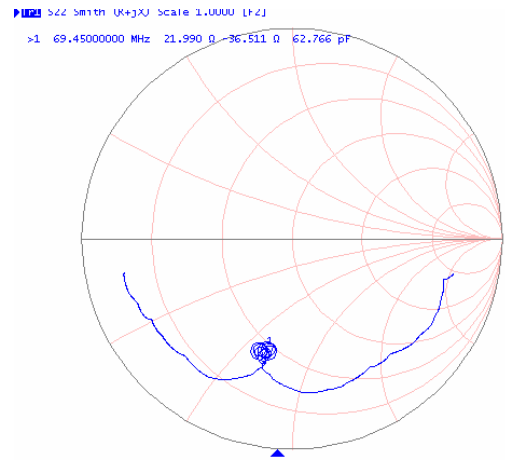
Group delay Variation($f_0 \pm 1.4\text{MHz}$)



Smith Chart S11



Smith Chart S22



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