

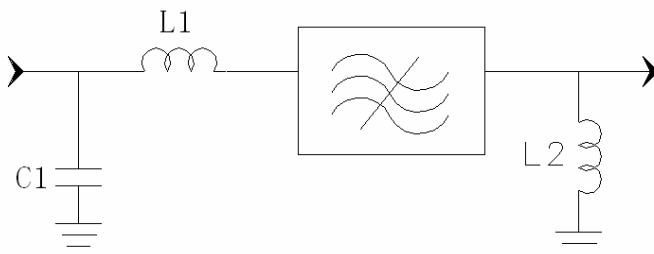
## Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	159.9	160	160.1
Insertion Loss	dB	-	29	32.5
1.5 dB Bandwidth	MHz	18.9	19.07	-
3 dB Bandwidth	MHz	19.2	19.34	-
40 dB Bandwidth	MHz	-	20.74	21
50 dB Bandwidth	MHz	-	20.92	-
Passband Variation( $f_0 \pm 9.375\text{MHz}$ )	dB	-	0.9	1.5
Absolute Delay	usec	-	2.7	-
Group Delay Variation( $f_0 \pm 9.375\text{MHz}$ )	nsec	-	30	100
Ultimate Rejection	dB	50	52	-
Material Temperature coefficient	KHz/°C	-2.88		
Ambient Temperature	°C	25		
Package Size	DIP3512 (35.2x12.7x5.2mm <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=39nH L2=22nH**

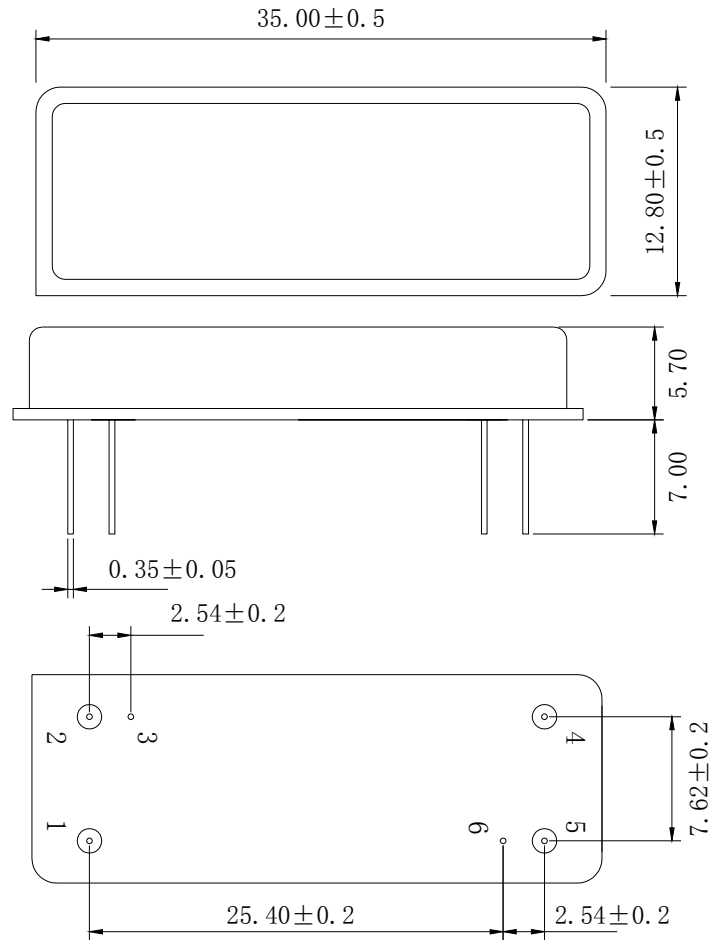
**C1=22pF**

**Source/Load Impedance=50 ohm**


Notes - Component values may change depending  
on board layout.

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*Package Dimension*

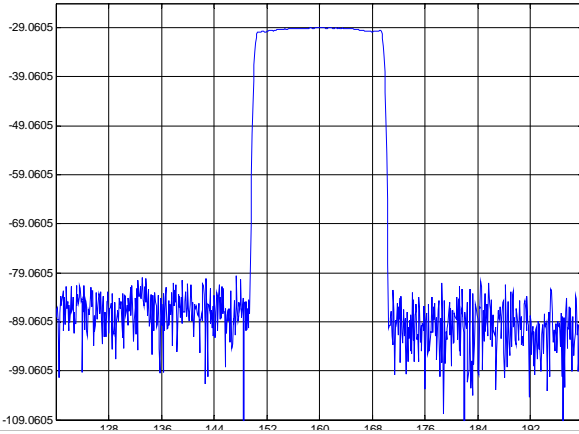


**Input:1**  
**Output:5**

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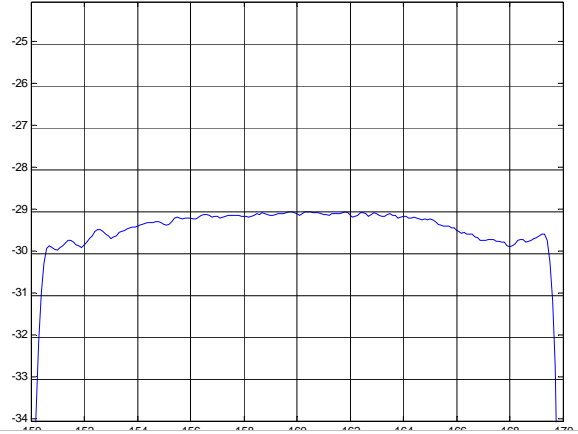
Typical Performance

Frequency Respond



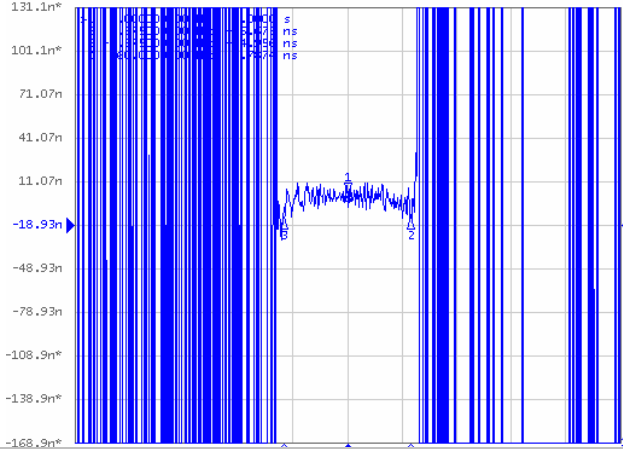
Group Delay Variation( $f_0 \pm 9.375\text{MHz}$ )

Passband Respond



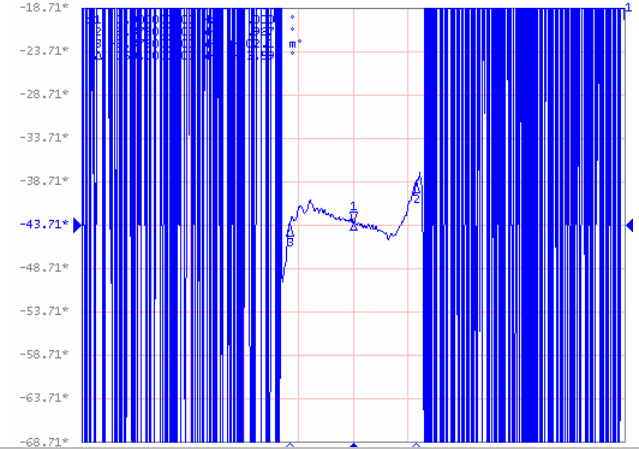
Phase Linearity( $f_0 \pm 9.375\text{MHz}$ )

S21 Delay 30.00ns/ Ref -18.93ns [Del]



Smith Chart S11

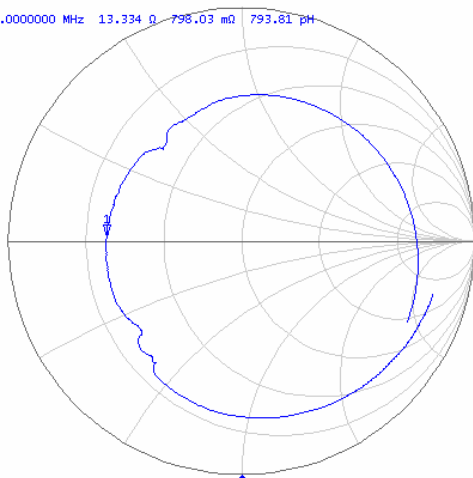
S21 Phase 5.000°/ Ref -43.71° [Del]



Smith Chart S22

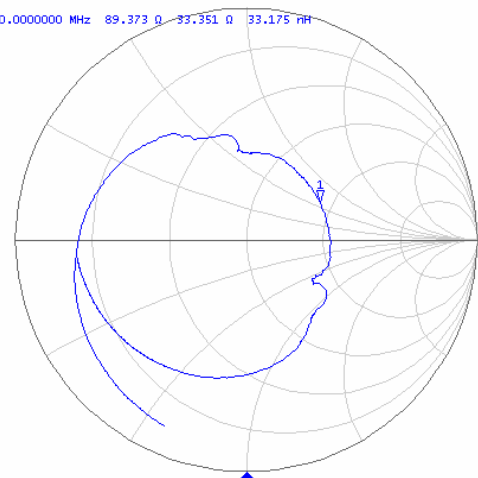
S11 Smith (R+jX) Scale 1.0000

>1 160.000000 MHz 13.334 Ω 798.03 mΩ 793.81 pF



S22 Smith (R+jX) Scale 1.0000

>1 160.000000 MHz 89.373 Ω 33.351 Ω 33.175 pF



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