

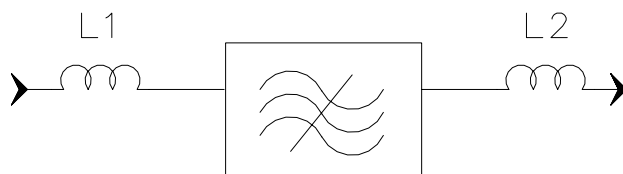
### Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	69.9	70	70.1
Insertion Loss	dB	-	26.2	27
1 dB Bandwidth	MHz	-	16.3	-
3 dB Bandwidth	MHz	16.4	16.47	16.5
35 dB Bandwidth	MHz	-	17.12	17.2
40 dB Bandwidth	MHz	-	17.17	-
45 dB Bandwidth	MHz	-	17.21	17.6
50 dB Bandwidth	MHz	-	17.25	18.4
55 dB Bandwidth	MHz	-	17.3	26.4
Passband Variation	dB	-	0.6	1
Absolute Delay	usec	-	3.75	5
Ultimate Rejection( $f_0 \pm 15\text{MHz}$ )	dB	55	60	-
Material Temperature coefficient	KHz/°C	-6.58		
Ambient Temperature	°C	25		
Package Size	DIP3512 (35.2x12.7x5.2mm3)			

#### 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



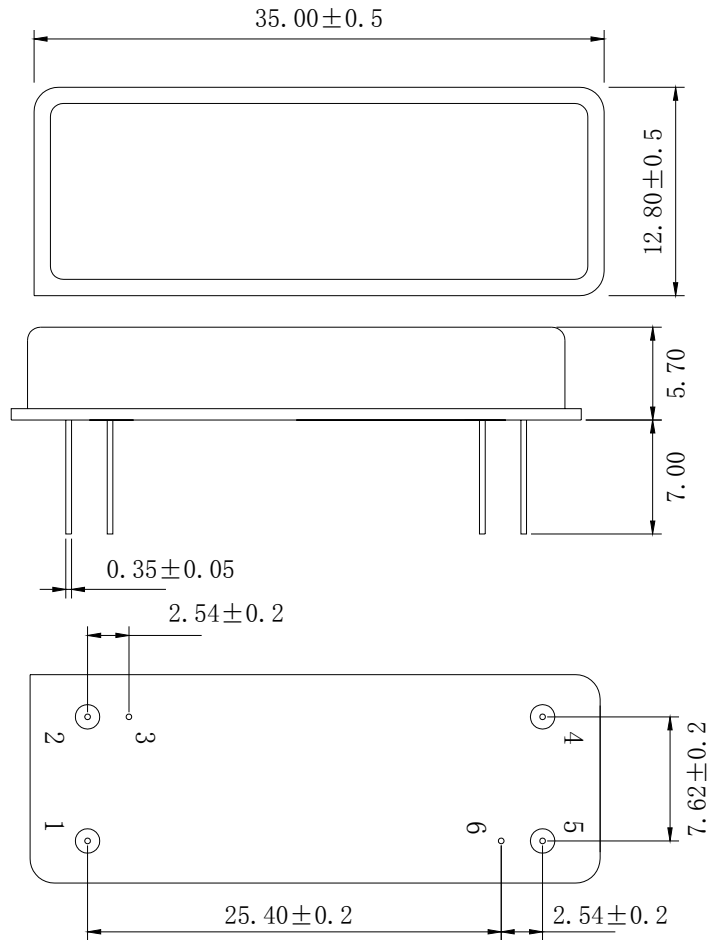
$$L1=L2=82\text{nH}$$

Source/Load Impedance=50 ohm


Notes - Component values may change depending on board layout.

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*Package Dimension*

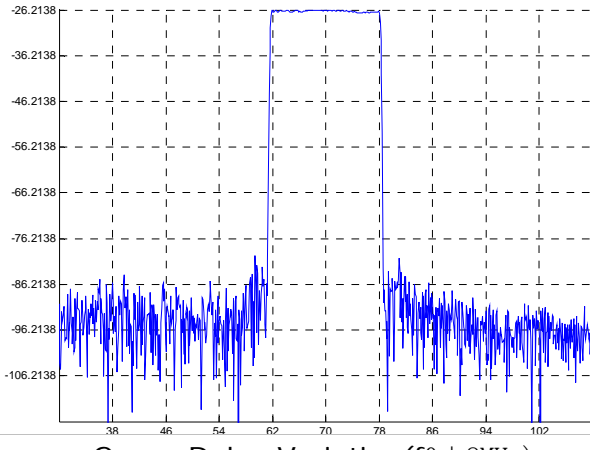


**Input:1**  
**Output:5**

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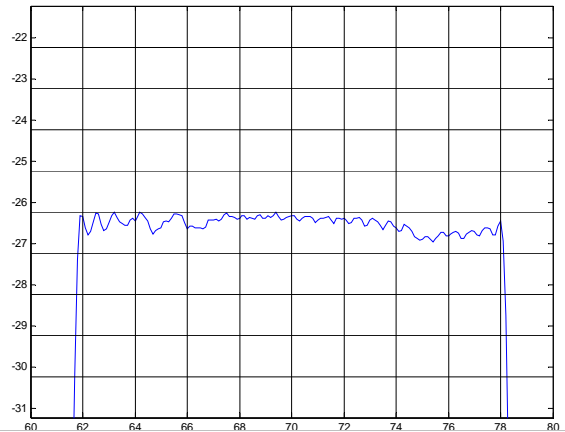
Typical Performance

Frequency Respond



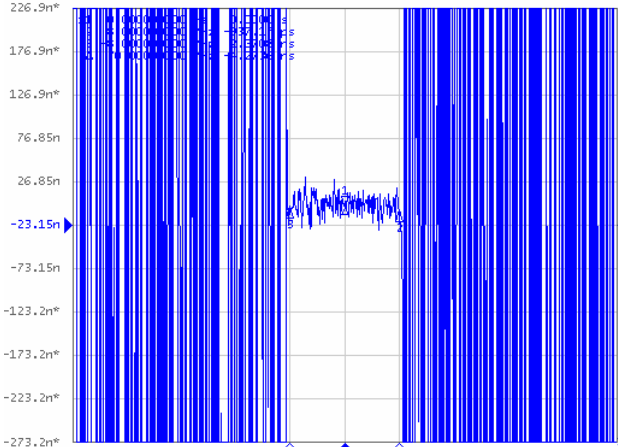
Group Delay Variation( $f_0 \pm 8\text{MHz}$ )

Passband Respond



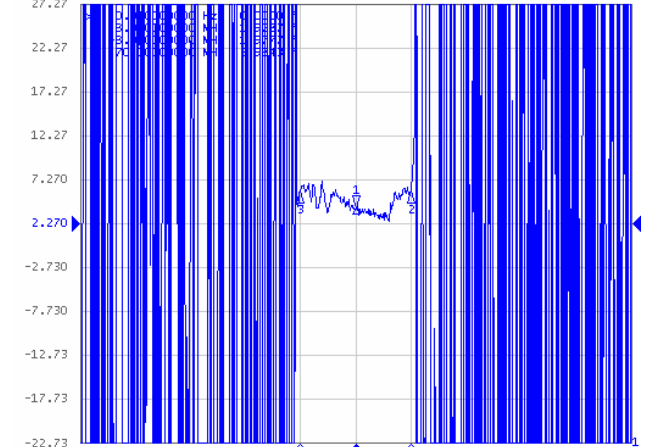
Phase Linearity( $f_0 \pm 8\text{MHz}$ )

S21 Delay 50.00ns/ Ref -23.15ns [F2 Del]



Smith Chart S11

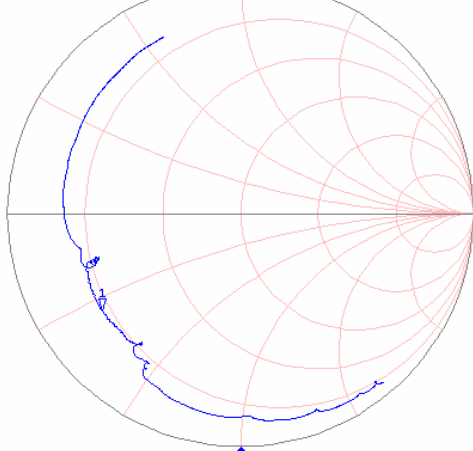
S22 Phase 5.000°/ Ref 2.270° [F2 Del]



Smith Chart S22

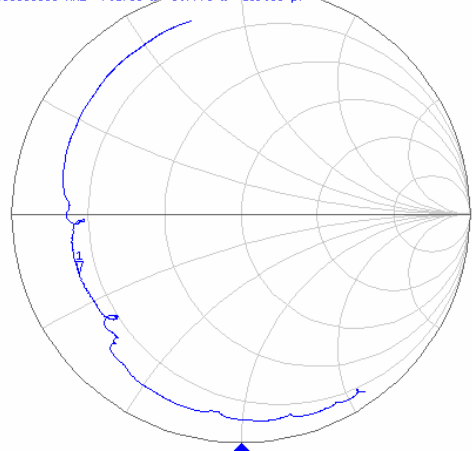
S11 Smith (R+jX) Scale 1.0000 [F2]

>1 70.00000000 MHz 8.8530 Ω -15.388 Ω 147.75 pF



S22 Smith (R+jX) Scale 1.0000 [F2]

>1 70.00000000 MHz 7.2768 Ω -8.7776 Ω 259.03 pF



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