

**SAW Filter 104MHz**  
**Part No: MP03075**

**Model: TB0754A**  
**Rev No: 1**

**A. MAXIMUM RATING:**

1. Operating Temperature: -20°C ~ +80°C
2. Storage Temperature: -40°C ~ +85°C
3. Input power: 10dBm

**B. CHARACTERISTICS:**

Ambient Temperature: 25°C

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency Fc MHz	-	104.0	-	-
Minimum Insertion loss IL 93.2MHz ~ 113.2MHz dB	-	10.8	15.0	-
Passband Ripple 93.2MHz ~ 113.2MHz dB	-	0.6	1.5	-
Attenuation:				
10MHz ~ 86MHz dB	40	52	-	-
122MHz ~ 200MHz dB	40	45	-	-
Substrate Material	YZ-LiNbO3			-
Temp Coefficient ppm/K	-	-94	-	-
Matching:				
1. The input of the filter will be matched to 50Ω				
2. The output of the filter will be matched to 50Ω				

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**C. FREQUENCY CHARACTERISTICS:**

1. S21 Response: (span: 200MHz)

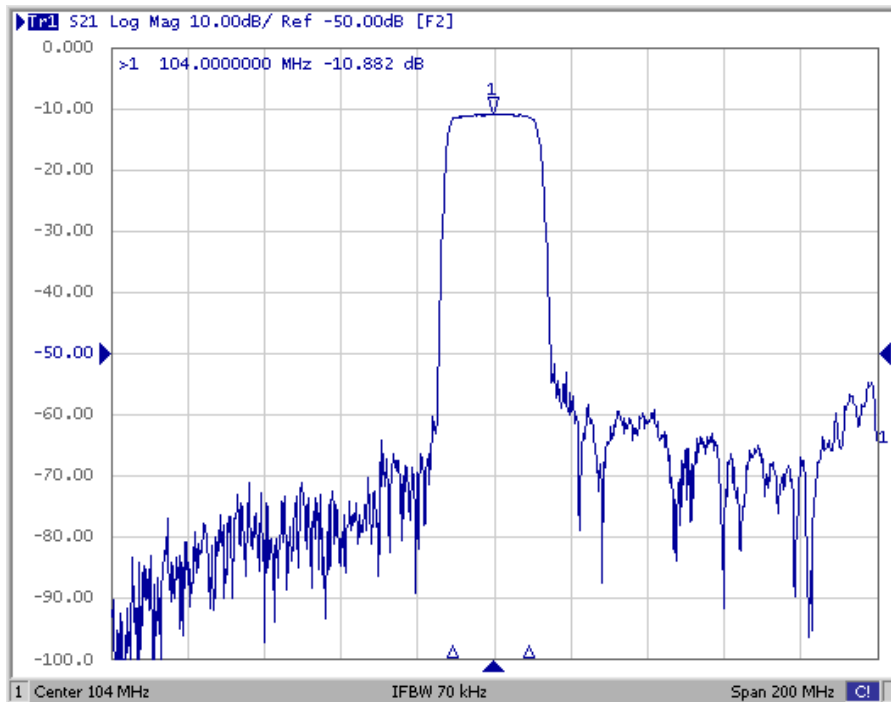


Fig 1. Horizontal: 20MHz/Div, Vertical: 10dB/Div

2. Group-Delay Ripple: (span: 20MHz)

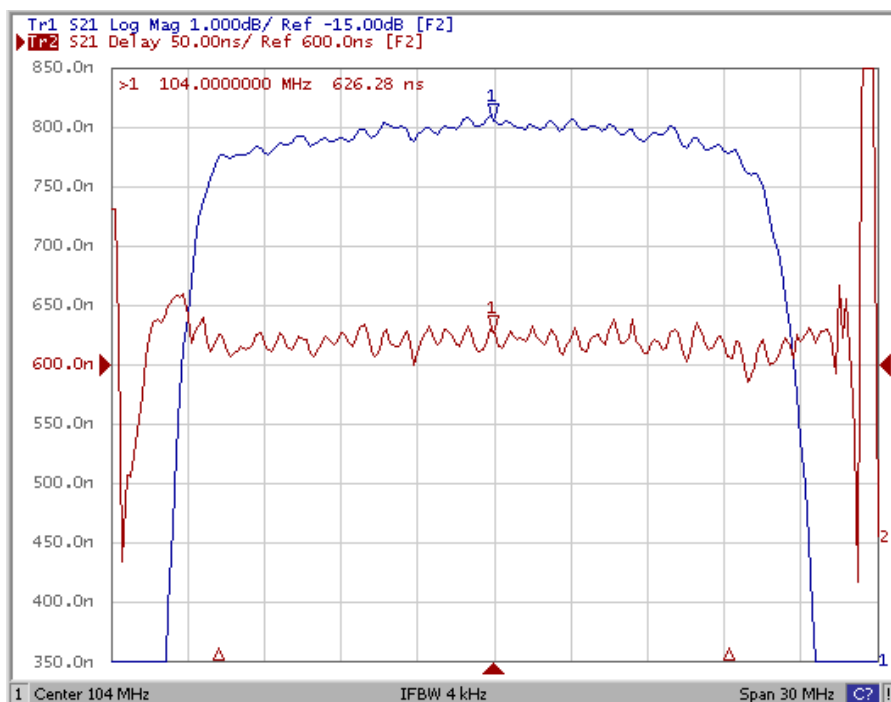
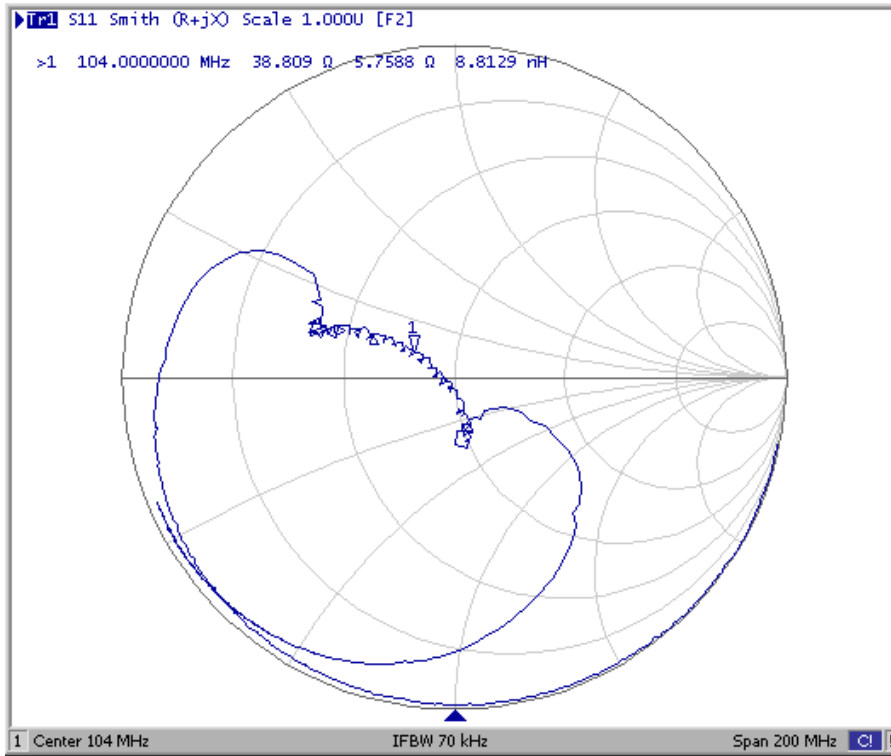


Fig 2. Horizontal: 3.0MHz/Div, Vertical: 50nec/Div

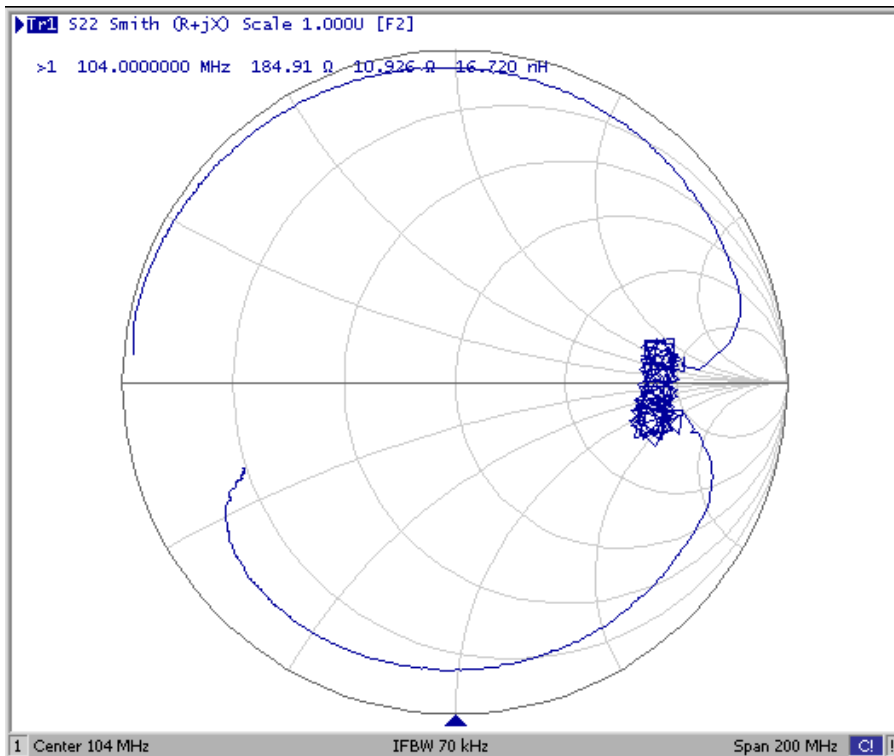
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3. S11 Smith Chart: (span: 200MHz)



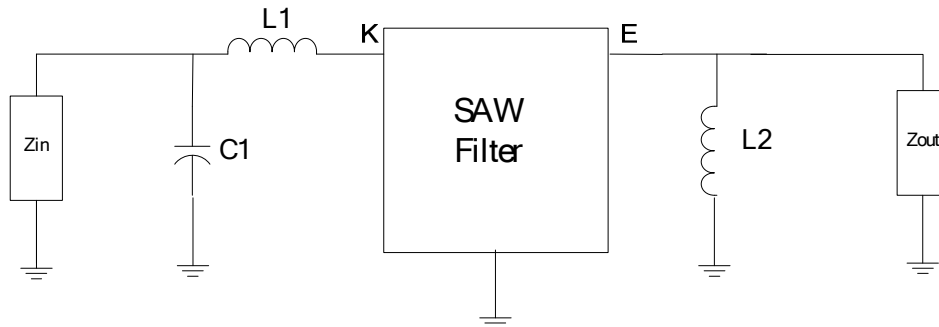
4. S22 Smith Chart (span: 200MHz)



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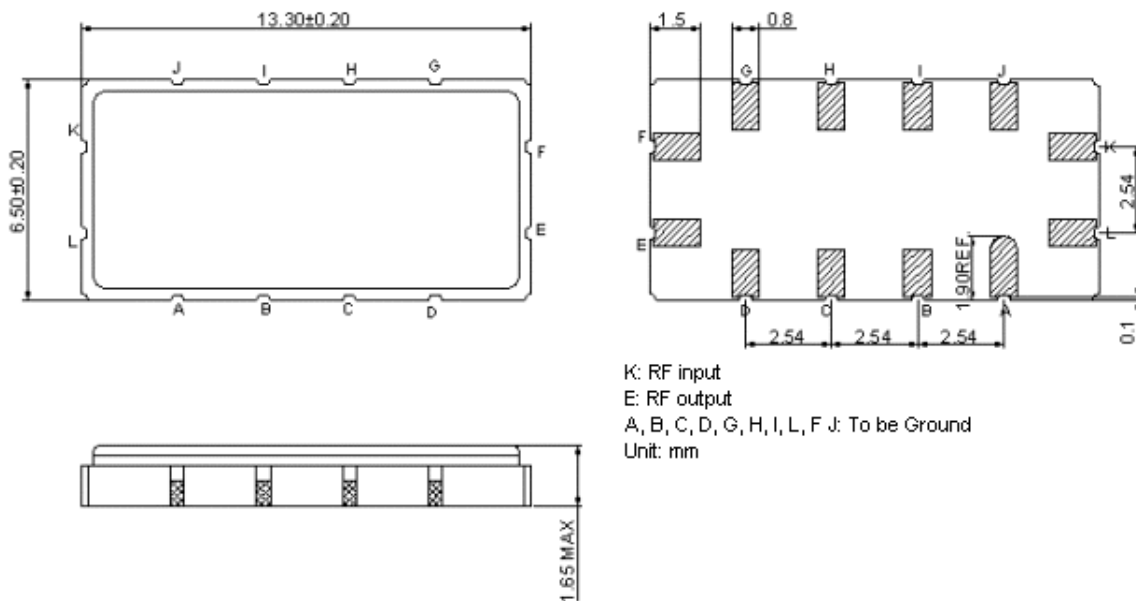
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**D. MEASUREMENT CIRCUIT:**

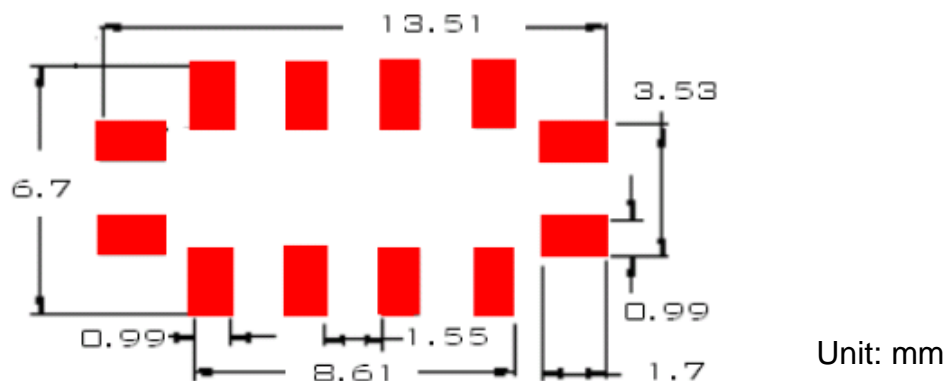


$Z_{IN} = Z_{OUT} = 50\Omega, L1 = 100nH, C1 = 56pF, L2 = 82nH$

**E. OUTLINE DRAWING:**



**F. PCB FOOTPRINT:**





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**H. RECOMMENDED REFLOW PROFILE:**

