

**SAW Filter 153.60MHz**  
**Part No: MP04606**

**Model: TB0781A**  
**Rev No. 1**

**A. MAXIMUM RATING:**

1. Operating Temperature: 0°C ~ +70°C
2. Storage Temperature: -40°C ~ +85°C
3. Input power: 10dBm

**B. CHARACTERISTICS:**

Ambient Temperature: 25°C

Characteristics	Min.	Typ.	Max.	Note
Center frequency Fc MHz	-	153.6	-	-
Minimum Insertion loss IL dB	-	7.1	13.0	-
1dB BW MHz	5	6.8	-	-
Passband Ripple (Fc ± 2.5MHz) dB	-	0.5	1.0	-
Attenuation (Reference to Minimum Insertion loss)				
141.1MHz dB	10	49	-	-
166.1MHz dB	10	49	-	-
Temp Coefficient ppm/K	-	-23	-	-
Matching:				
<ol style="list-style-type: none"> <li>1. The input of the filter will be matched to 50ohm</li> <li>2. The output of the filter will be matched to 50ohm</li> </ol>				

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**C. FREQUENCY CHARACTERISTICS:**

1. S21 Response: (span: 50MHz)

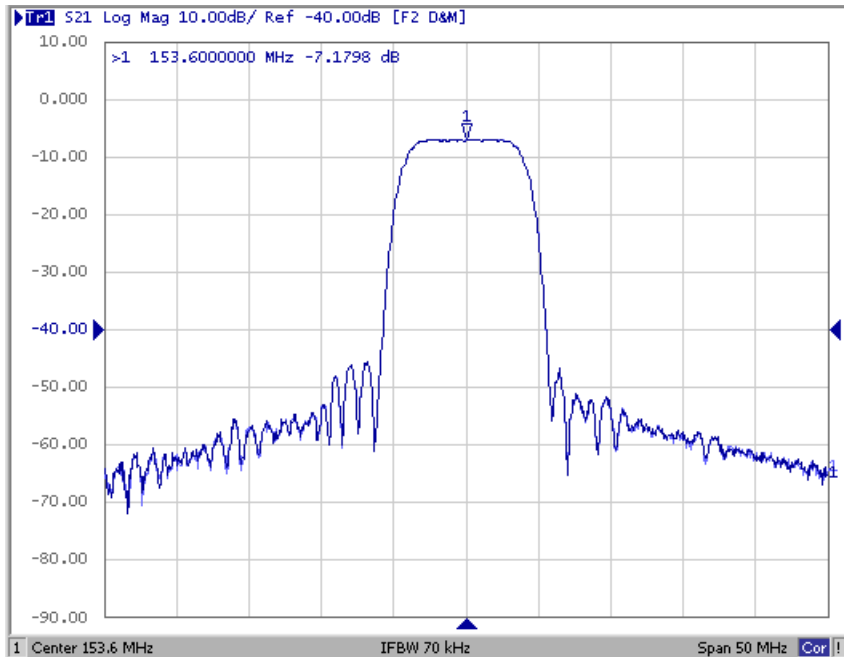


Fig. 1. Horizontal: 5MHz/Div, Vertical: 10dB/Div

2. Group-Delay Ripple: (span: 10MHz)

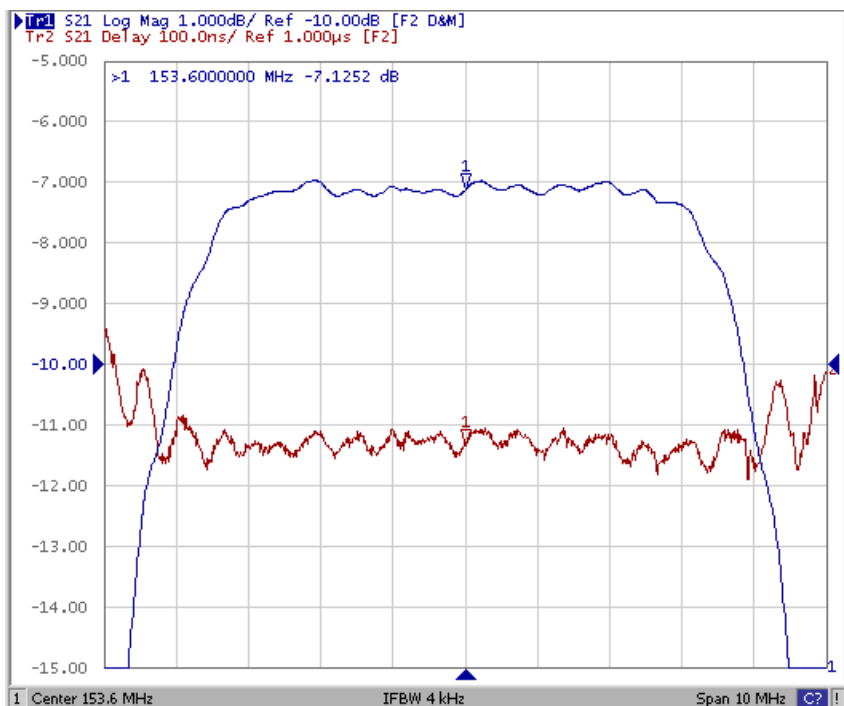
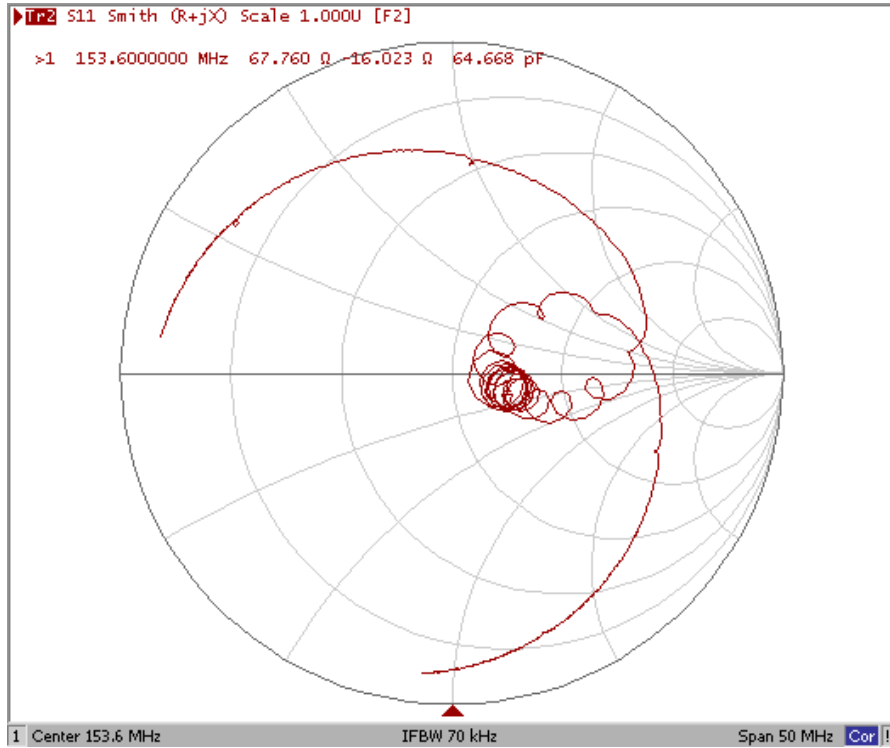


Fig. 2. Horizontal: 1MHz/Div, Vertical: 100nec/Div

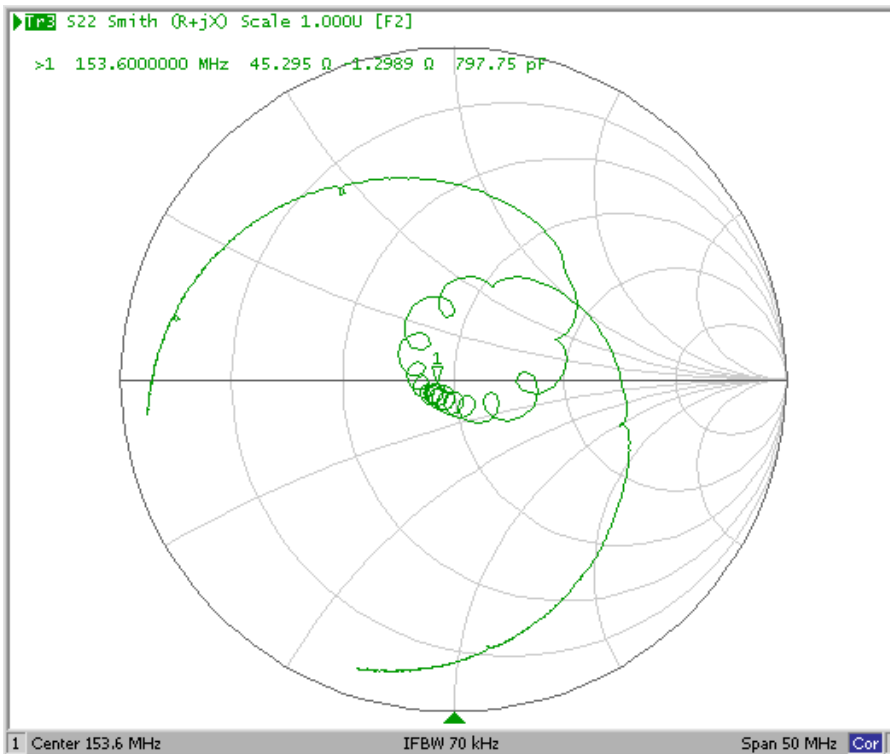
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3. S11 Smith Chart: (span: 50MHz)



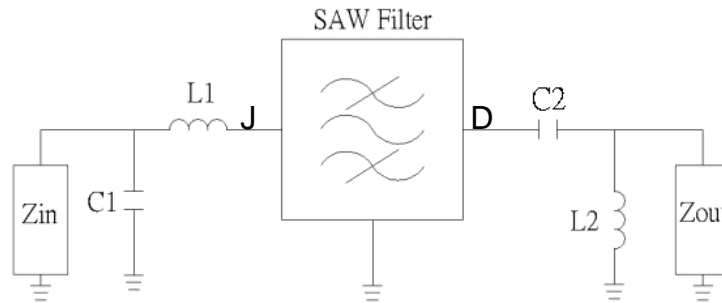
4. S22 Smith Chart (span: 50MHz)



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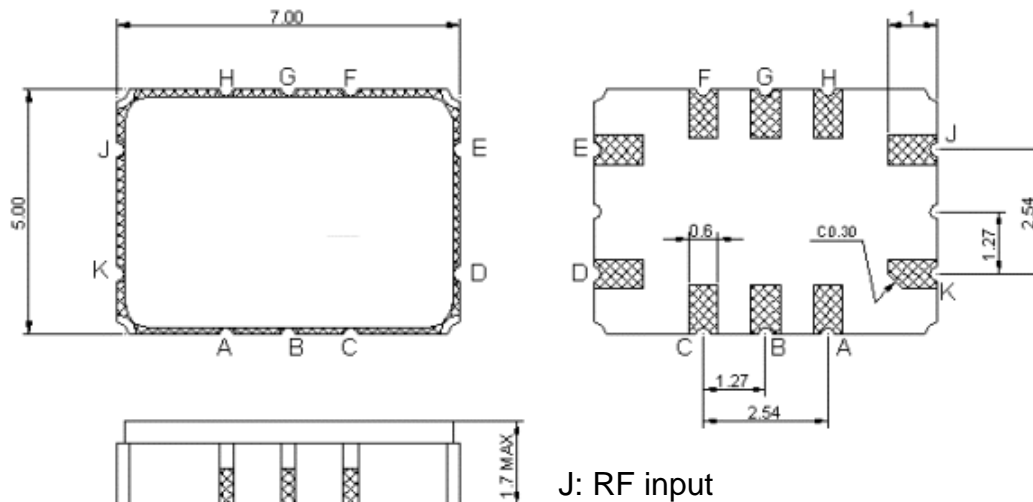
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**D. MEASUREMENT CIRCUIT:**



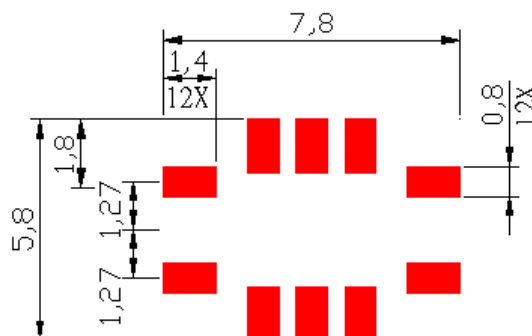
$Z_{in}$  and  $Z_{out}$  are  $50\ \Omega$ .  
 $L1=82\text{nH}, C1=33\text{pF}, L2=82\text{nH}, C2=39\text{pF}$

**E. OUTLINE DRAWING:**



J: RF input  
 D: RF output  
 K, E: Case Ground  
 A, B, C, F, G, H: Ground  
 Unit: mm

**F. PCB FOOTPRINT:**

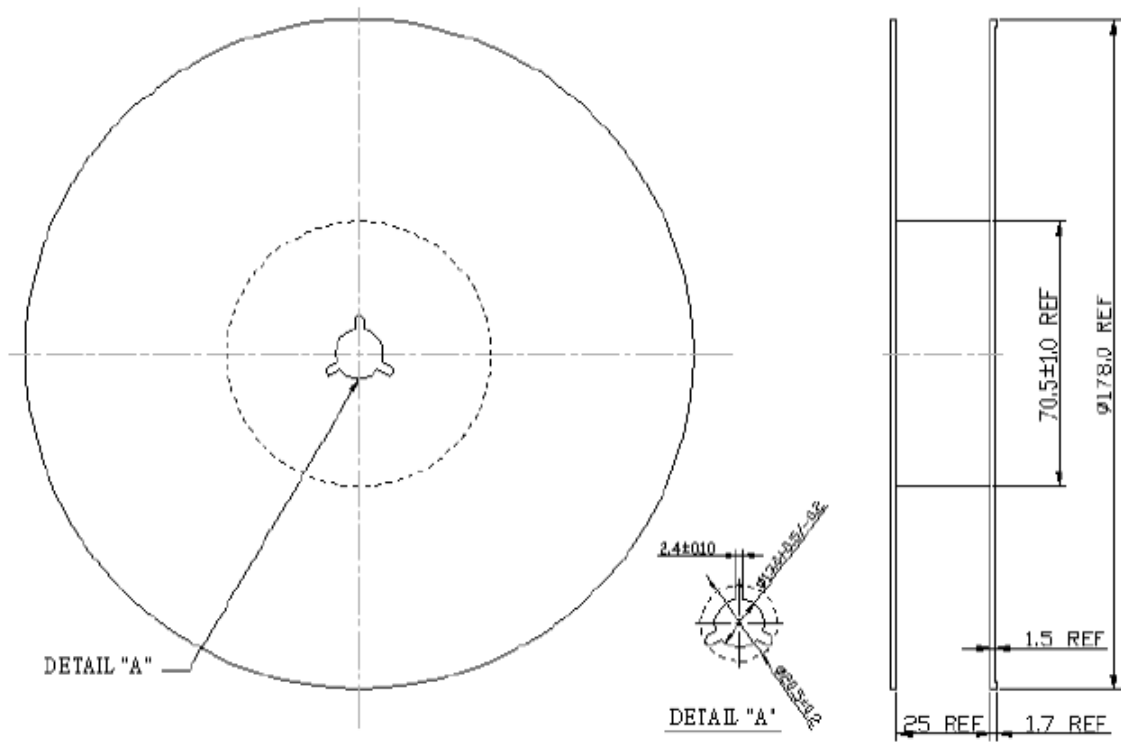


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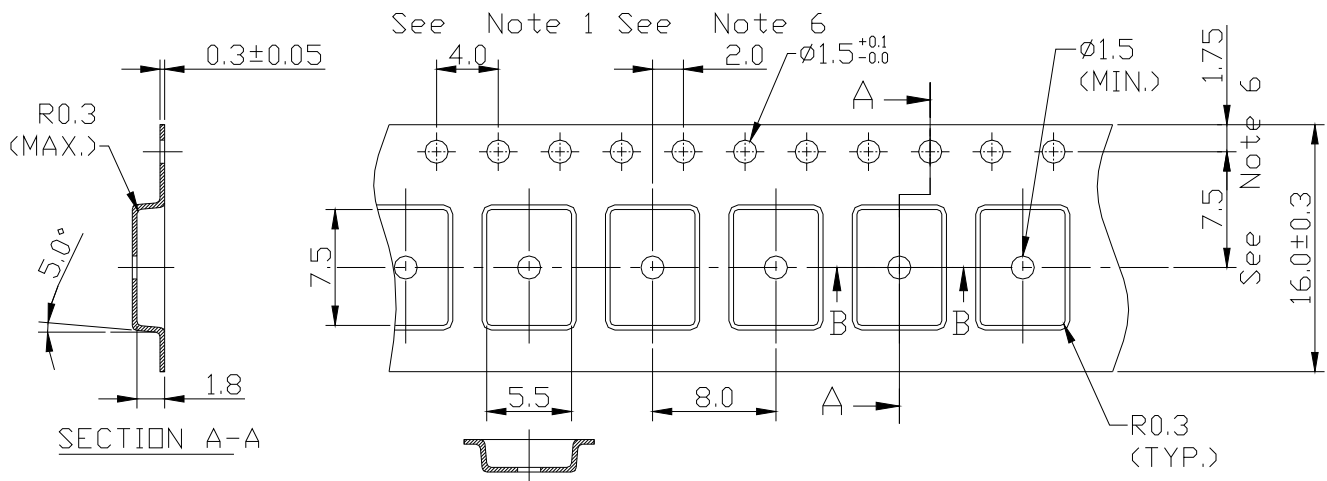
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**G. PACKING:**

1. Reel Dimension



2. Tape Dimension



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**H. RECOMMENDED REFLOW PROFILE:**

