

**SAW Filter 109.0MHz**  
**Part No: MP03432**

**Model: TB0770A**  
**Rev No: 1**

**A. MAXIMUM RATING:**

1. Operating Temperature: -40°C ~ +85°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	108.6	109	109.4	-
Maximum Insertion loss IL dB	-	9.5	12.5	-
1dB Bandwidth MHz	5.80	7.0	-	-
3dB Bandwidth MHz	6.85	7.8	-	-
40dB Bandwidth MHz	-	10.6	11.0	-
Passband Ripple (Fc ± 2.4MHz) MHz	-	0.40	1.00	-
Phase Linearity (Fc ± 2.4MHz) (P-P) deg	-	6.8	14	-
Group Delay Ripple (Fc ± 2.4MHz) nS	-	120	200	-
Group Delay at Fc uS	-	1.14	-	-
Temp Coefficient ppm/°C	-	-18	-	-

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**C. FREQUENCY CHARACTERISTICS:**

1. S21 Response: (span: 80MHz)

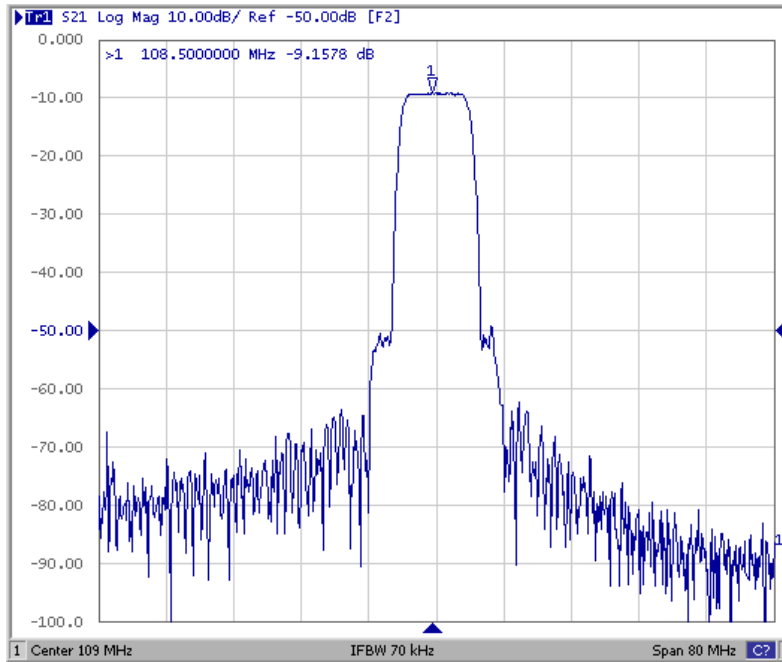


Fig. 1. Horizontal: 8MHz/Div, Vertical: 10dB/Div

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

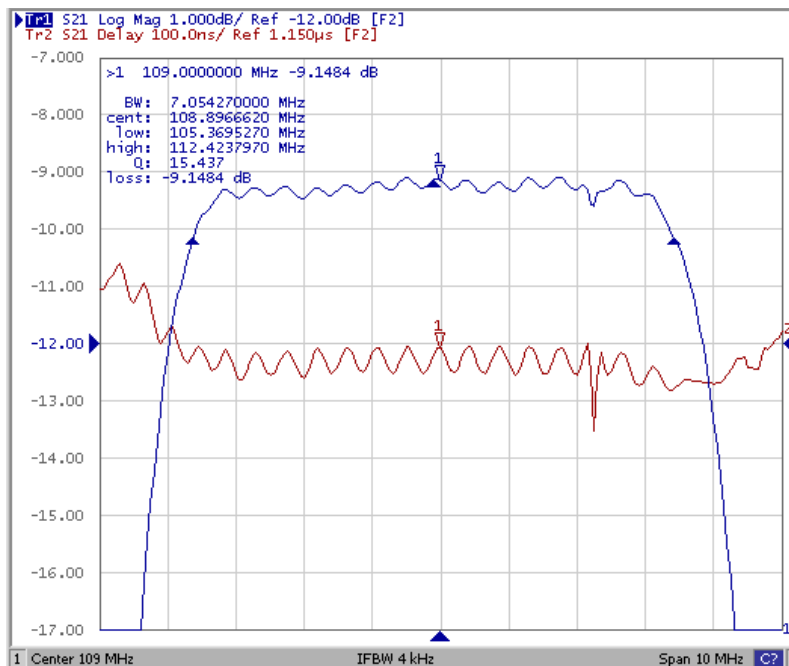
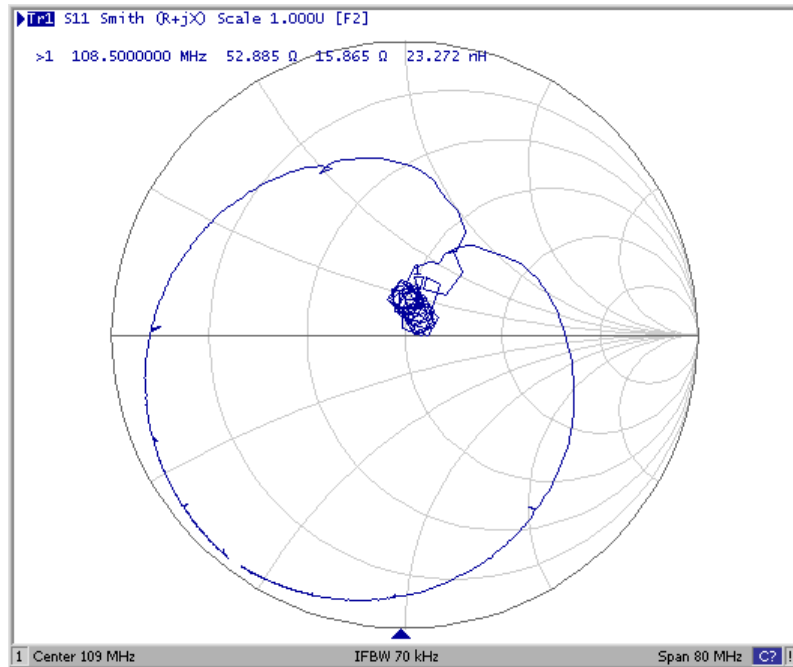


Fig. 2. Horizontal: 1.0MHz/Div, Vertical: 100nec/Div

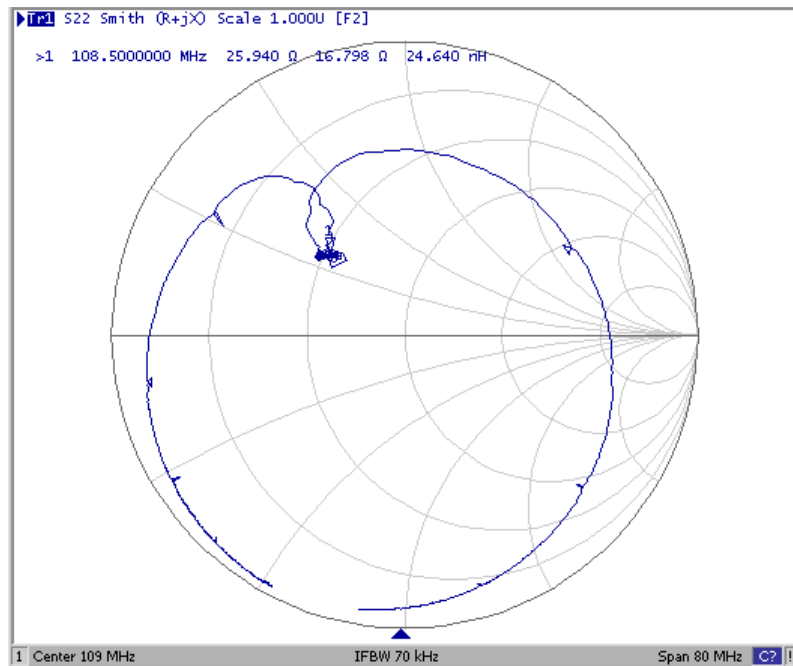
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3. S11 Smith Chart: (span: 80MHz)



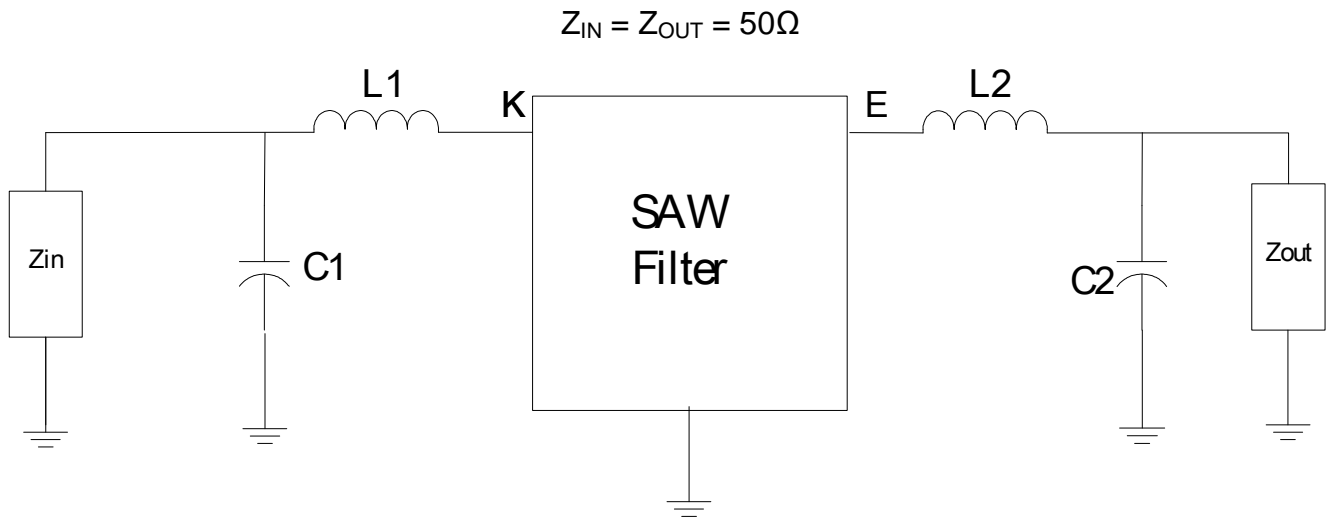
4. S22 Smith Chart (span: 80MHz)



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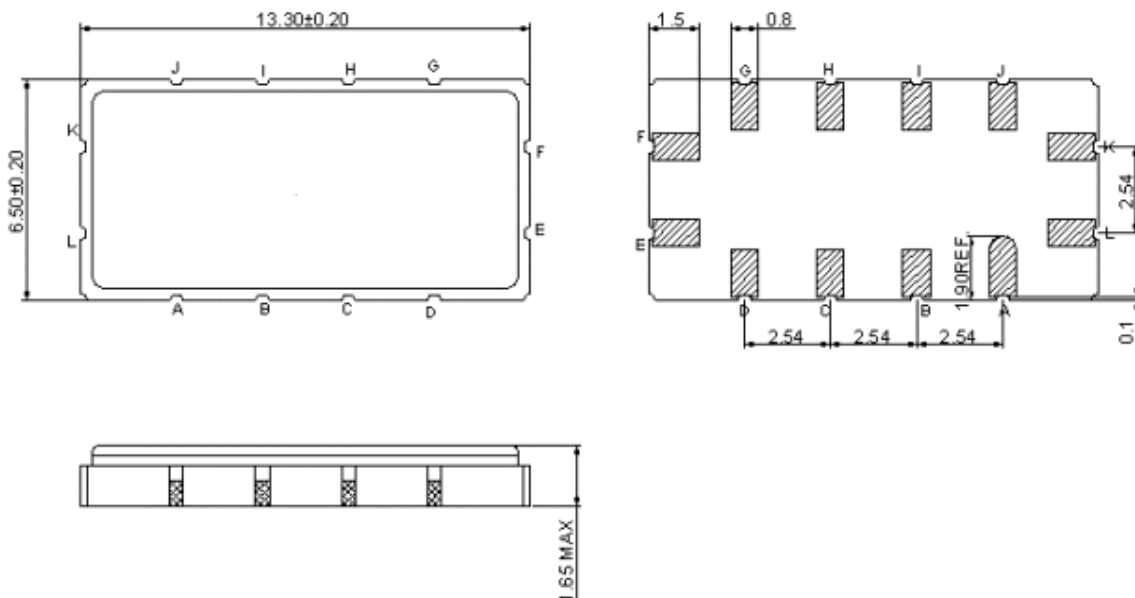
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**D. MEASUREMENT CIRCUIT:**



$L1 = 133\text{nH}$ ,  $C1 = 36\text{pF}$ ,  $L2 = 133\text{nH}$ ,  $C2 = 15\text{pF}$

**E. OUTLINE DRAWING:**



K: RF input  
 E: RF output  
 A, B, C, D, G, H, I, L, F J: To be Ground  
 Unit: mm

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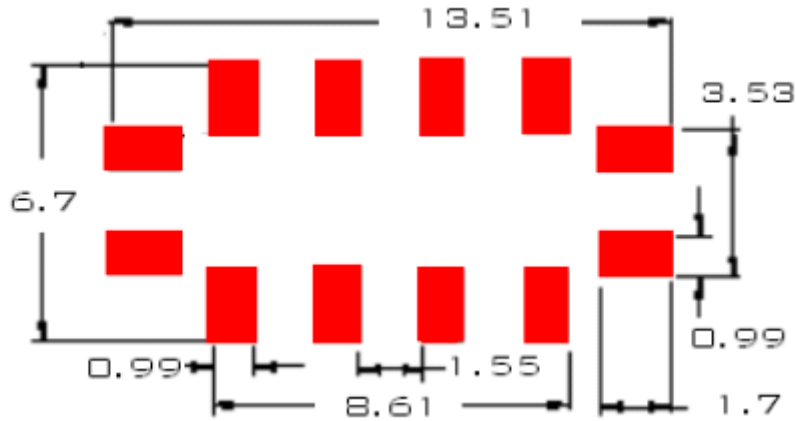
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**F. PCB FOOTPRINT:**

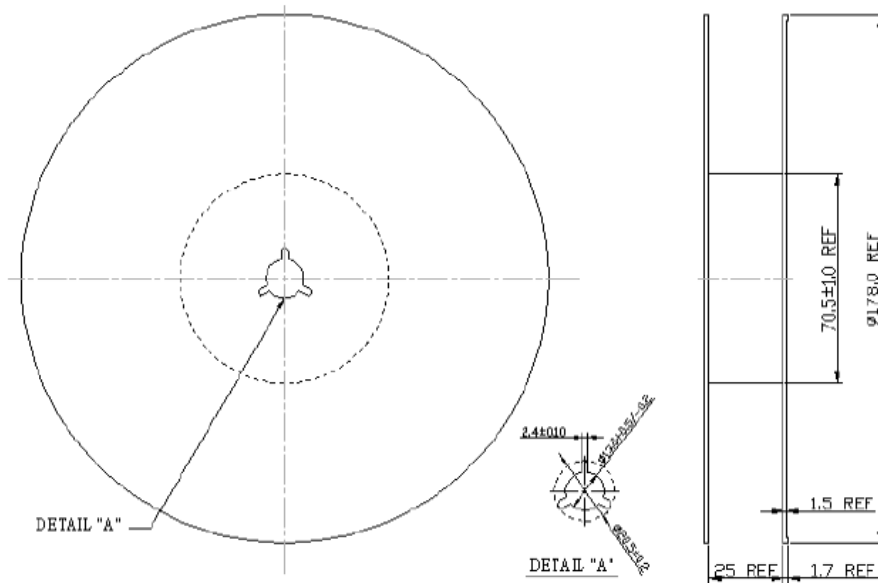


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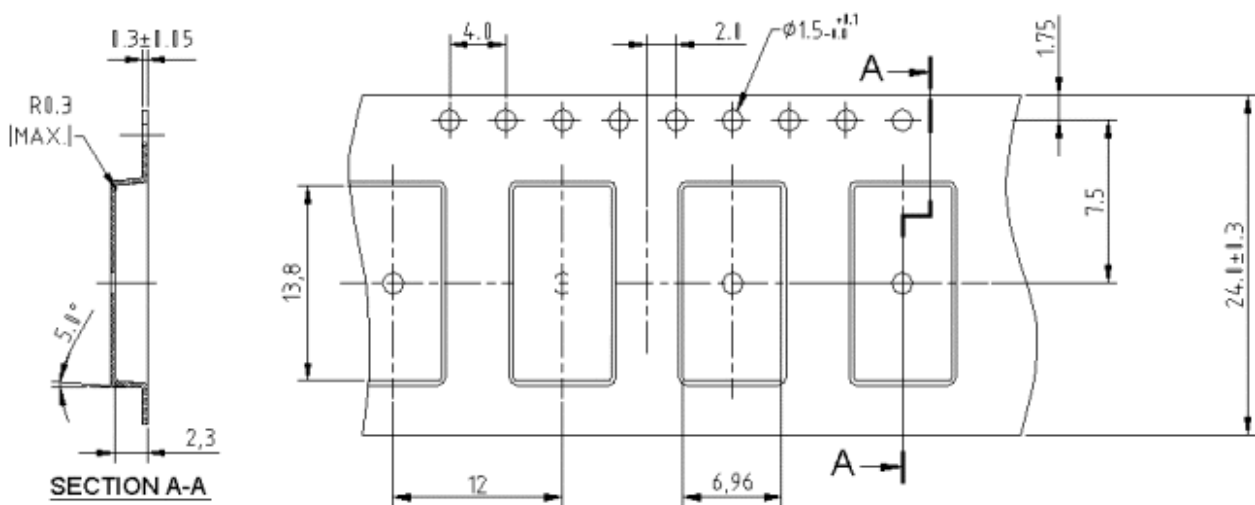
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**G. PACKING:**

1. REEL DIMENSION



2. TAPE DIMENSION



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**H. RECOMMENDED REFLOW PROFILE:**

