

SAW Filter 104.0MHz

Model: TB0754B

Part No: MP07990 (AEC-Q200 compliant)

Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Operating Temperature: -40°C ~ +85°C
2. Storage Temperature: -40°C ~ +125°C
3. Input power: 10dBm

B. CHARACTERISTICS:

Ambient Temperature: 25°C

Characteristics	Min.	Typ.	Max.	Note
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: <ol style="list-style-type: none"> 1. The input of the filter will be matched to 50ohm 2. The output of the filter will be matched to 50ohm 				

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C. FREQUENCY CHARACTERISTICS:

1. S21 Response: (span: 200MHz)

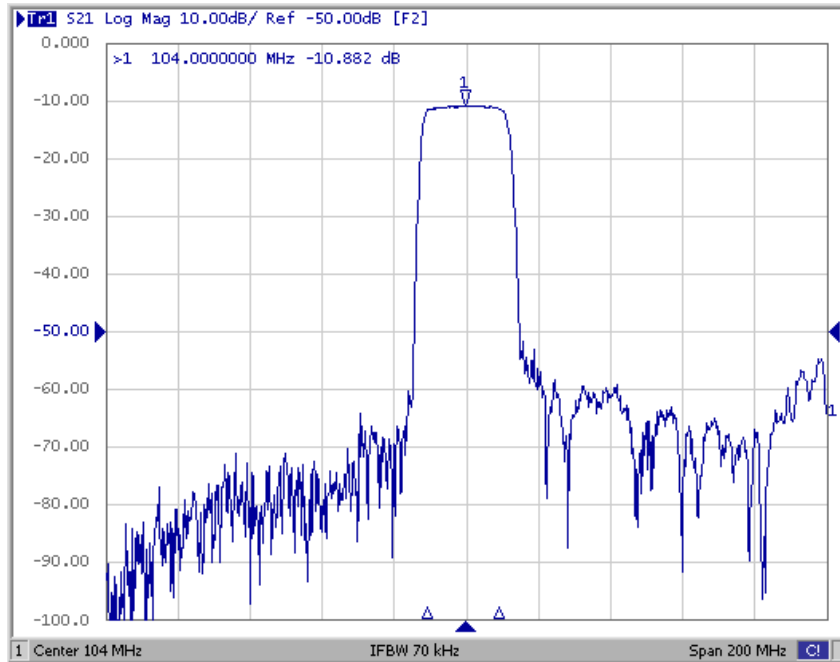


Fig. 1. Horizontal: 20MHz / Div, Vertical: 10dB / Div

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

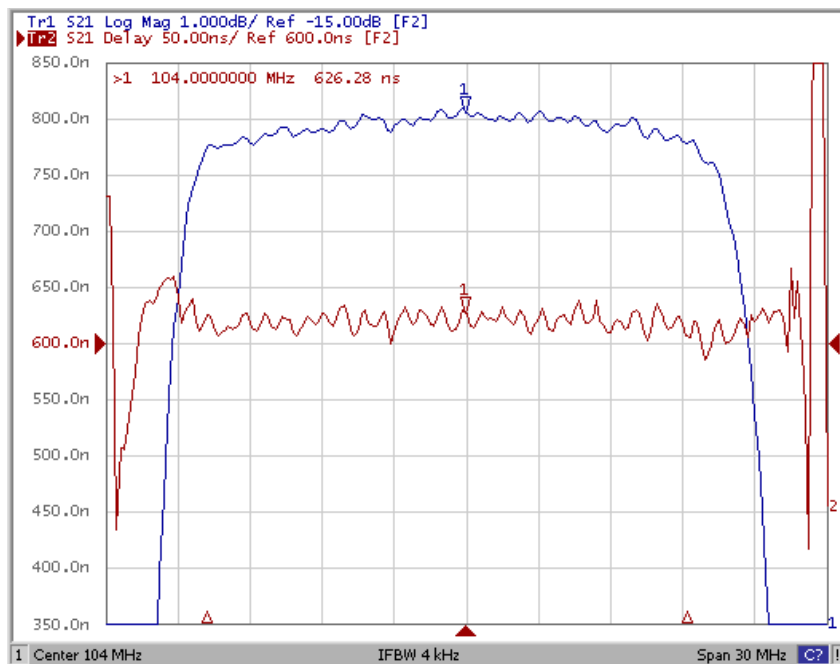
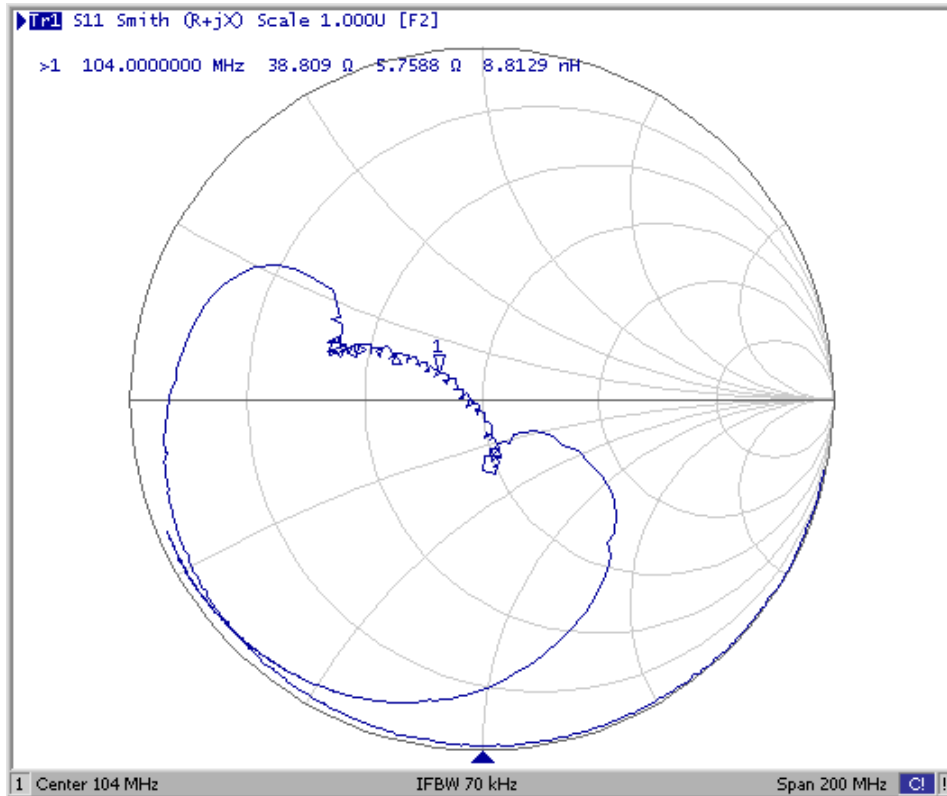


Fig. 2. Horizontal: 3.0MHz / Div, Vertical: 50nec / Div

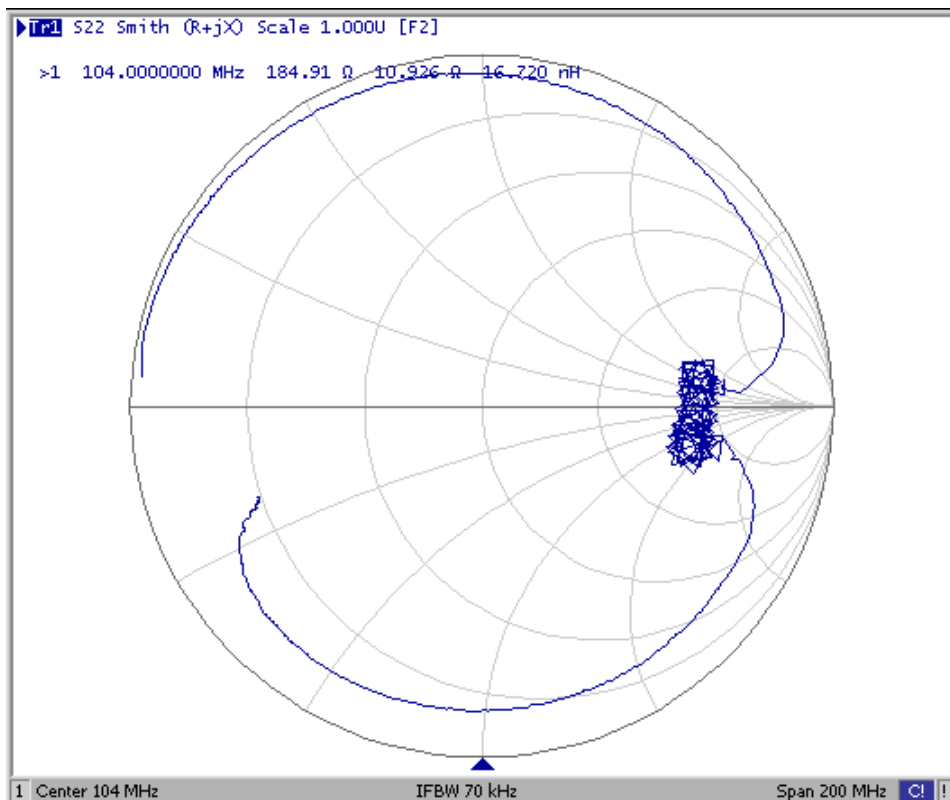
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3. S11 Smith Chart: (span: 200MHz)



4. S22 Smith Chart (span: 200MHz)

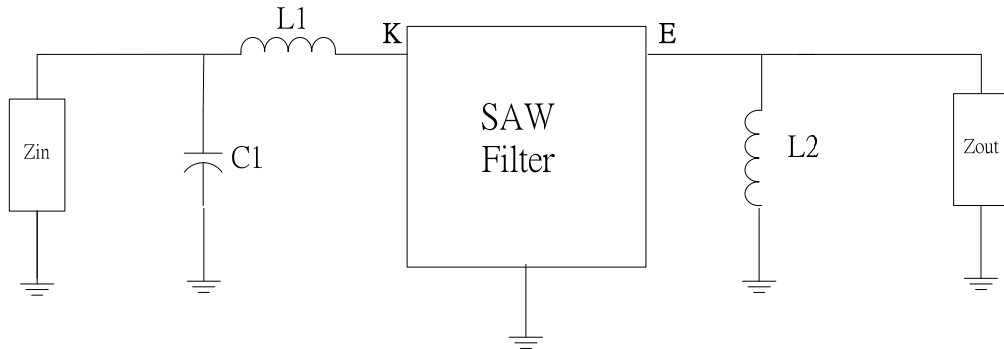


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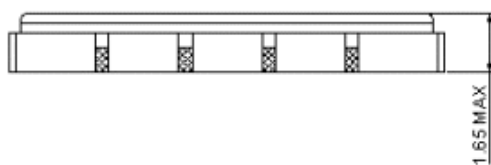
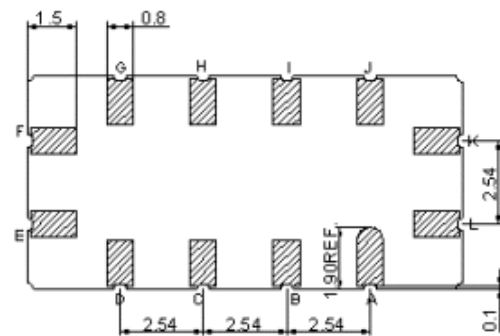
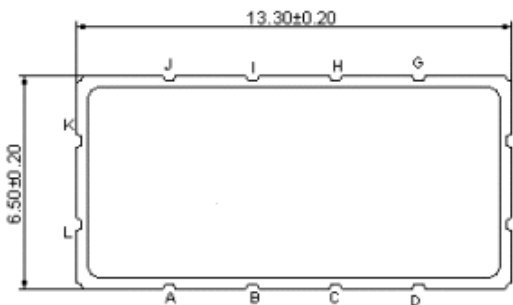
D. MEASUREMENT CIRCUIT:

$$Z_{IN} = Z_{OUT} = 50\Omega$$



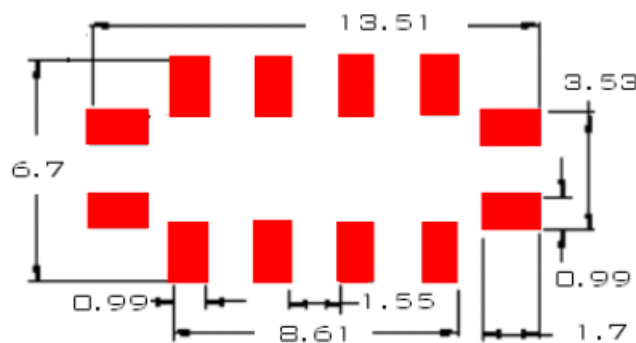
$$L1 = 100\text{nH}, C1 = 56\text{pF}, L2 = 82\text{nH}$$

E. OUTLINE DRAWING:



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

F. PCB FOOTPRINT:



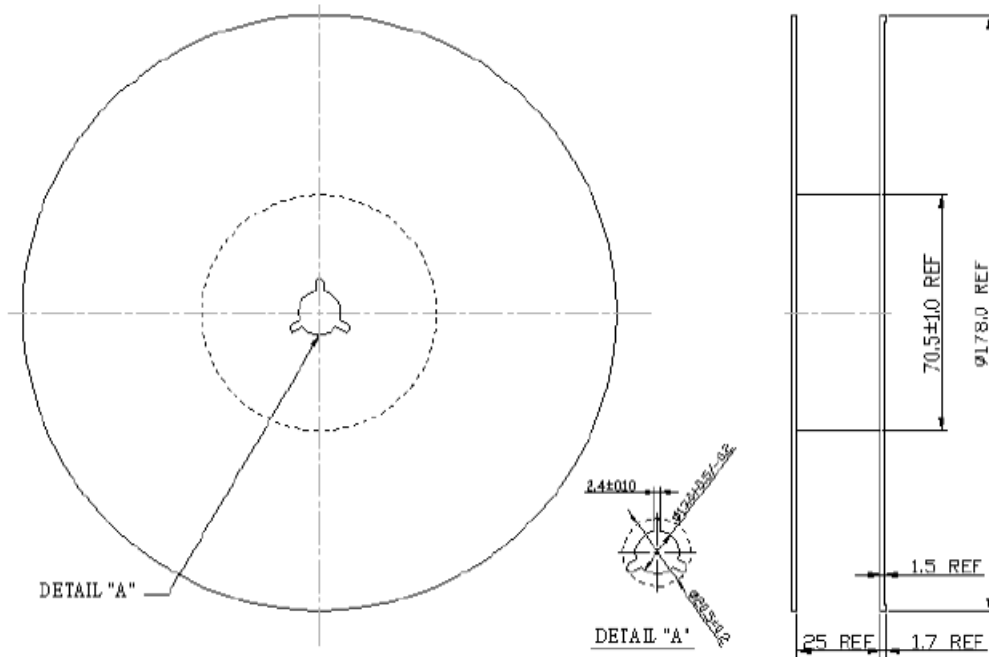
Unit: mm

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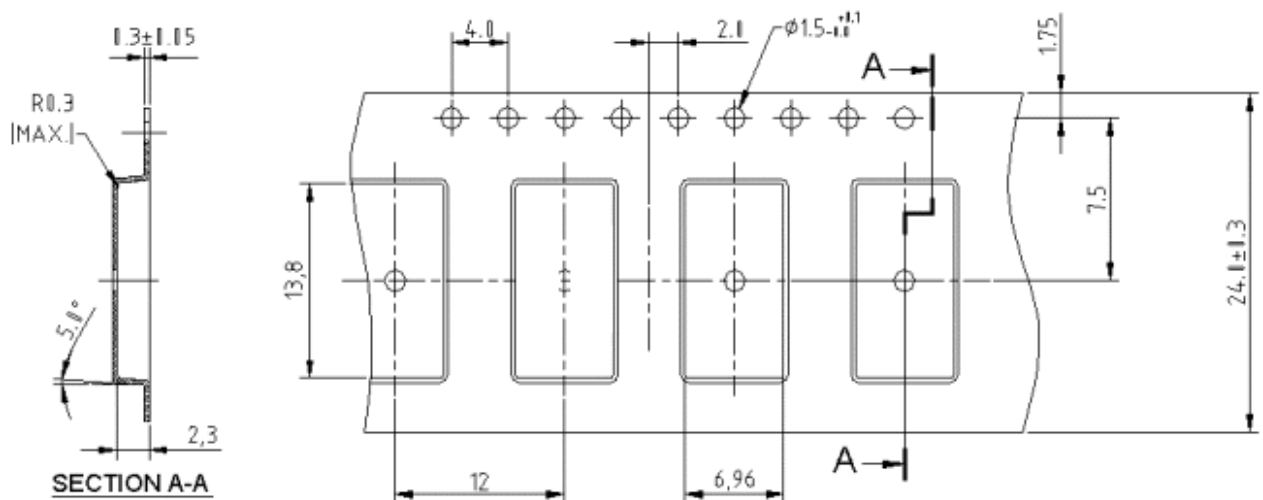
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G. PACKING:

1. Reel Dimension



2. Tape Dimension



Unit: mm

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H. RECOMMENDED REFLOW PROFILE:

