

SAW Filter 153.60MHz
Part No: MP03831

Model: TB0783A
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	Value			Note
	Min.	Typ.	Max.	
Center frequency Fc MHz	-	153.6	-	-
Minimum Insertion loss I.L dB	-	7	13.0	-
1dB BW MHz	15	17.2	-	
Passband Ripple (Fc ± 7.5MHz) dB	-	0.7	1.0	-
Attenuation (Reference to Minimum Insertion loss)				
141.1MHz dB	10	41	-	-
166.1MHz dB	10	42	-	-
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: 50MHz)

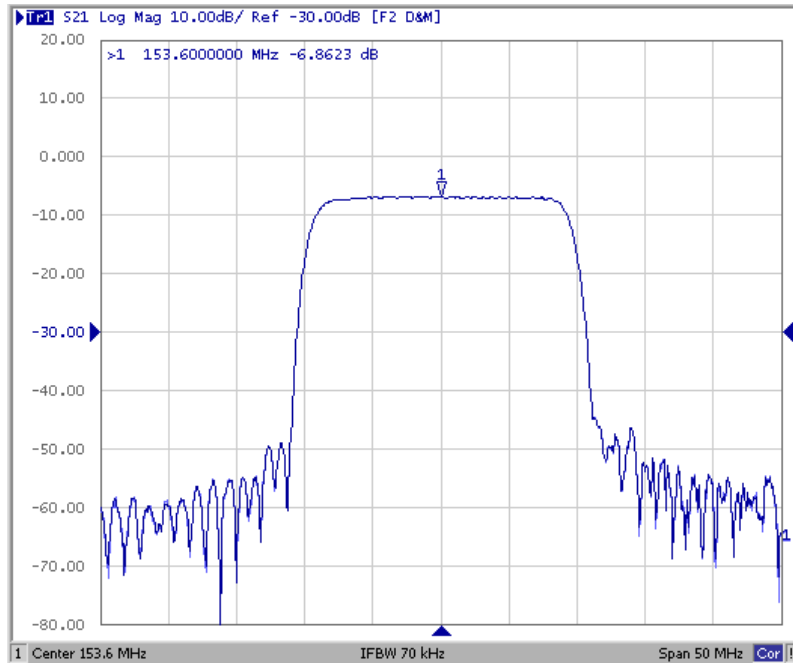


Fig. 1. Horizontal: 5MHz/Div, Vertical: 10dB/Div

2. Group-Delay Ripple: (span: 25MHz)

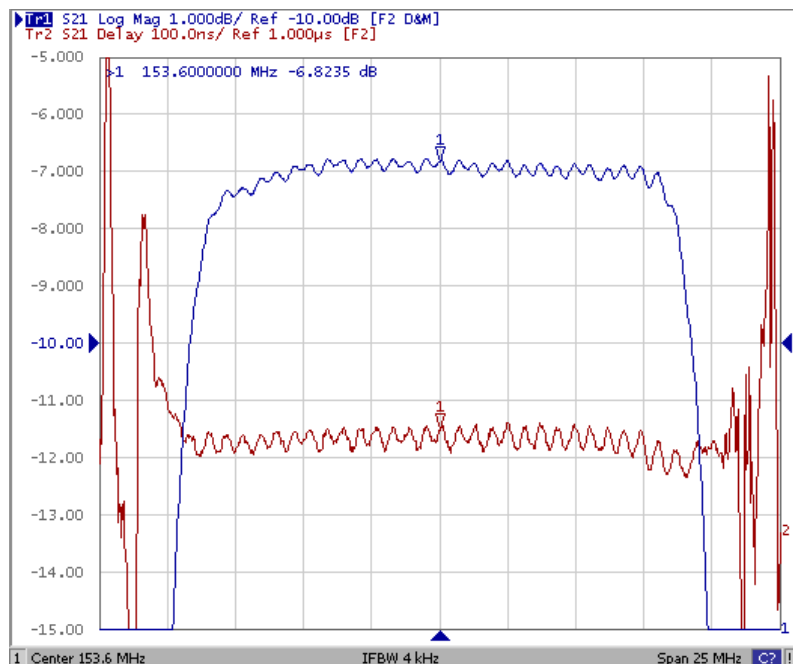
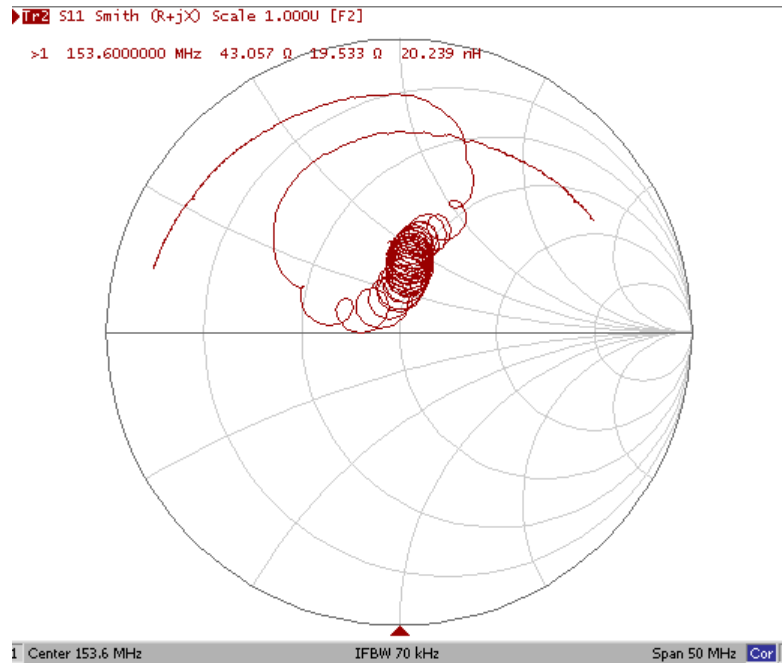


Fig. 2. Horizontal: 2.5MHz/Div, Vertical: 100nec/Div

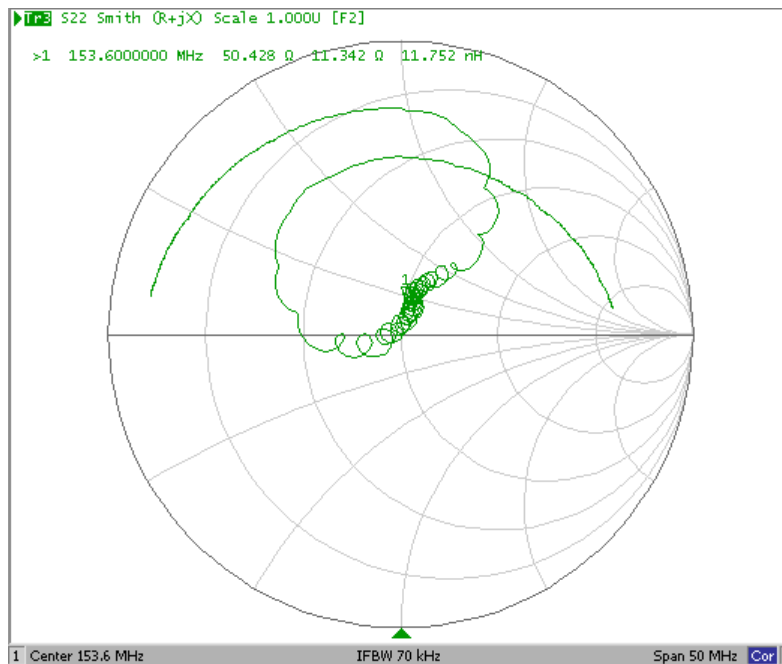
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3. S11 Smith Chart: (span: 50MHz)



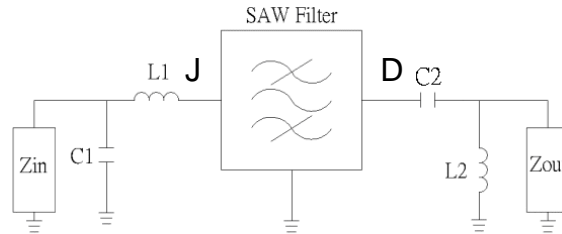
4. S22 Smith Chart (span: 50MHz)



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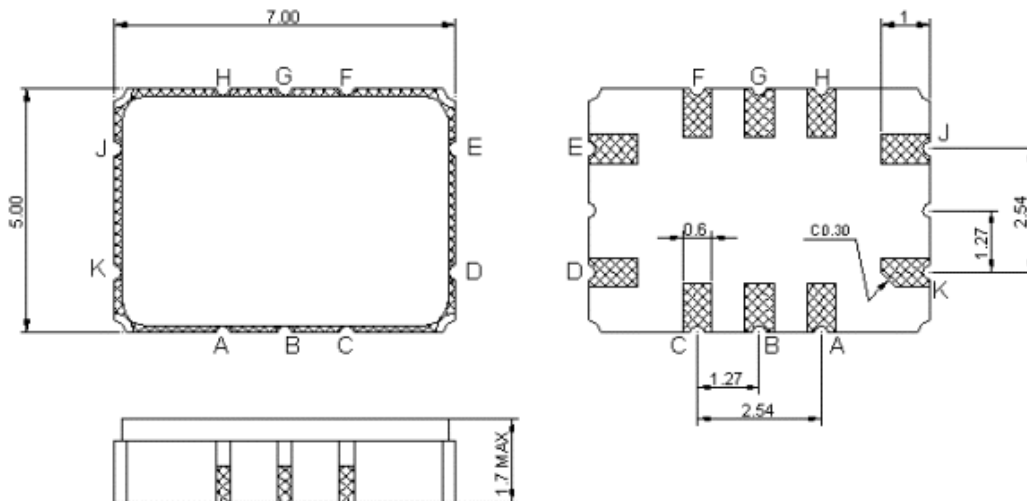
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D. MEASUREMENT CIRCUIT:



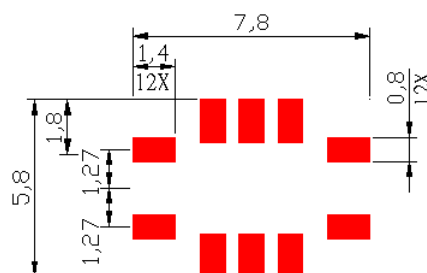
Z_{in} and Z_{out} are $50\ \Omega$.
 $L1=90\text{nH}$, $C1=15\text{pF}$, $L2=94\text{nH}$, $C2=18\text{pF}$

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:

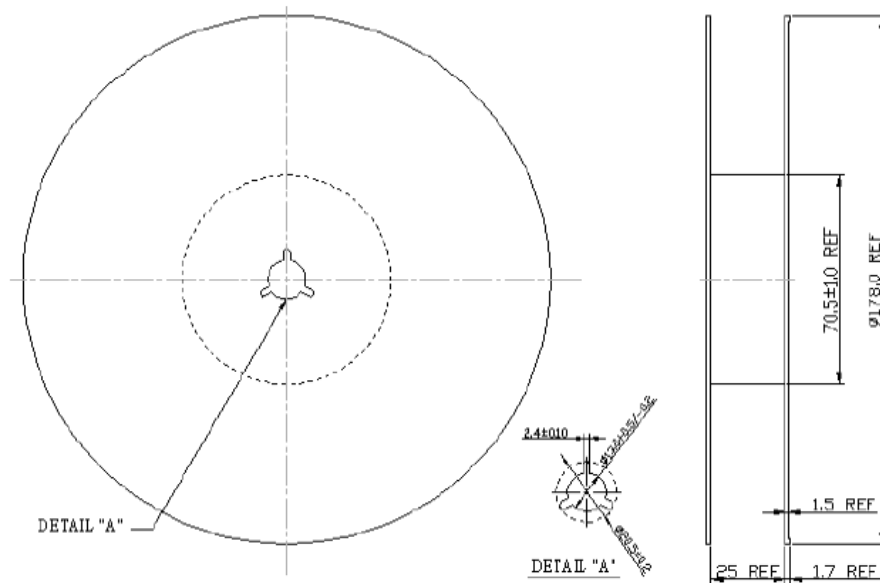


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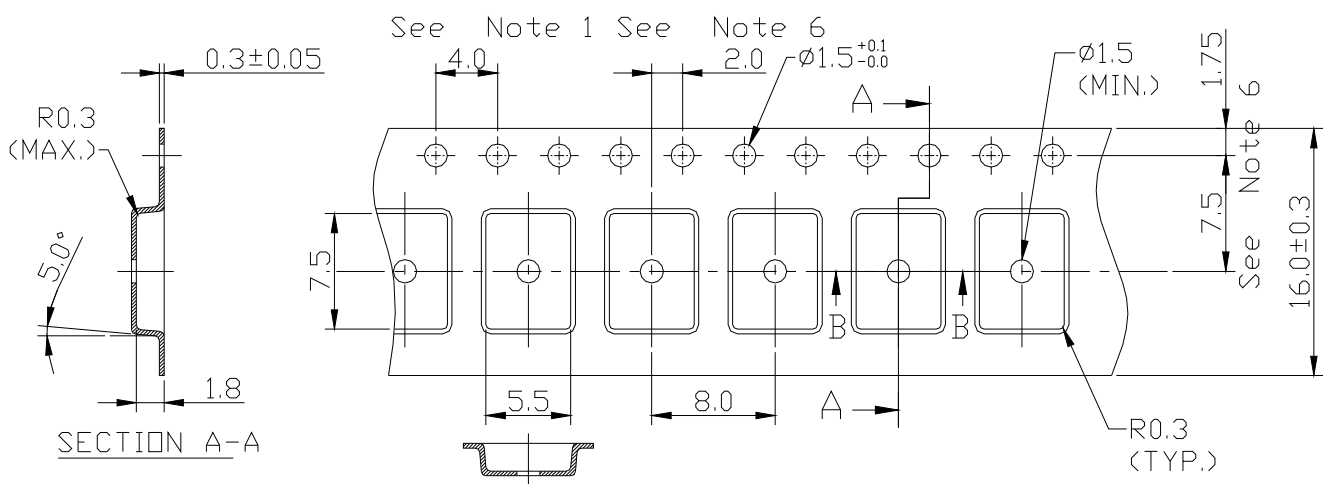
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G. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION



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H. RECOMMENDED REFLOW PROFILE:

