

SAW Filter Low Loss 70.0MHz
Part No: MA08181

Model: TB0194A
Rev. No: 2

A. MAXIMUM RATING:

Electrostatic Sensitive Device

1. Input Power Level: 10dBm
2. Operating Temperature: -40°C to +85°C
3. Storage Temperature: -40°C to +85°C
4. Moisture Sensitivity Level: Level1 (MSL1)

B. ELECTRICAL CHARACTERISTICS:

Ambient Temperature: 25°C

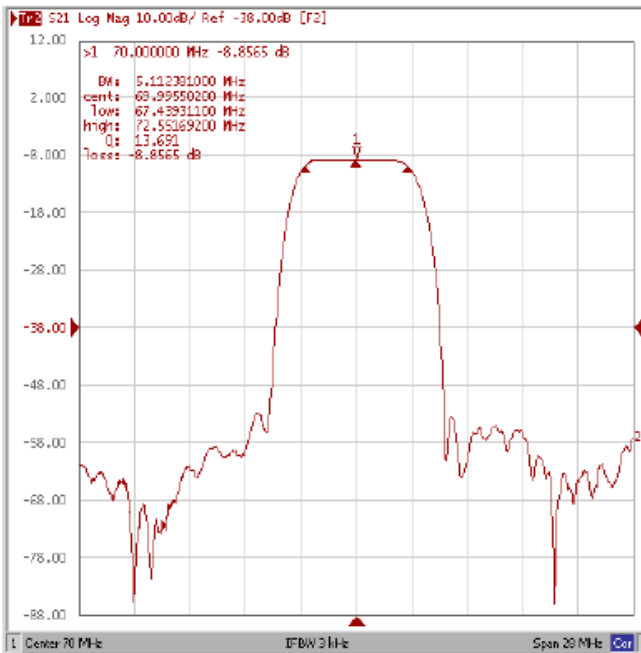
Item	Unit	Min.	Typ.	Max.	Note
Center frequency Fc	MHz	-	70	-	
Insertion Loss IL	dB	-	9.0	11.0	
1dB Bandwidth	MHz	4.4	5.1	-	
3dB Bandwidth	dB	-	5.97	-	
35dB Bandwidth	MHz		8.55	9.0	
Passband ripple Fc ±1.7MHz	dB	-	0.3	1.0	
Group Delay ripple Fc ±1.7MHz	nS		40	100	
Absolute Delay	µS	-	0.88	-	
Attenuation Reference level from Min IL)					
56MHz ~ 65.5MHz	dB	40	45	-	
74.5MHz ~81.2MHz	dB	37	42	-	
81.2MHz ~84MHz	dB	40	45	-	
Temperature Coefficient	ppm/°C	-	-86	-	

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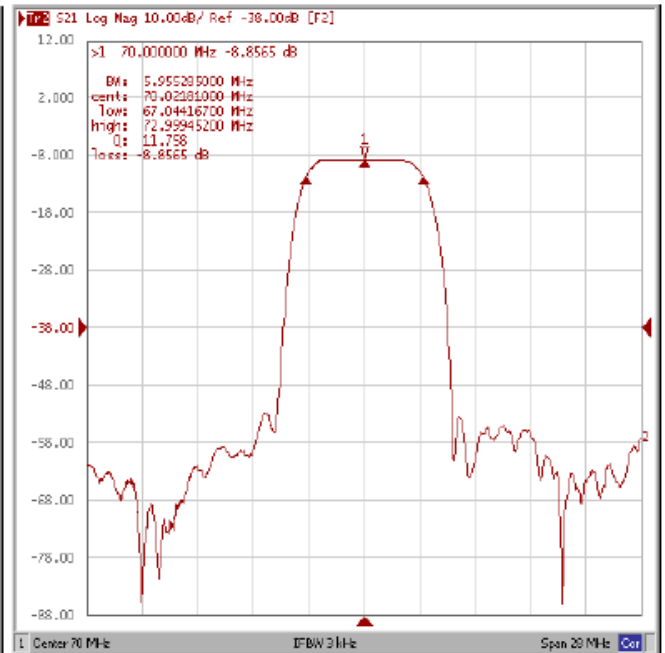
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C. FREQUENCY CHARACTERISTICS:

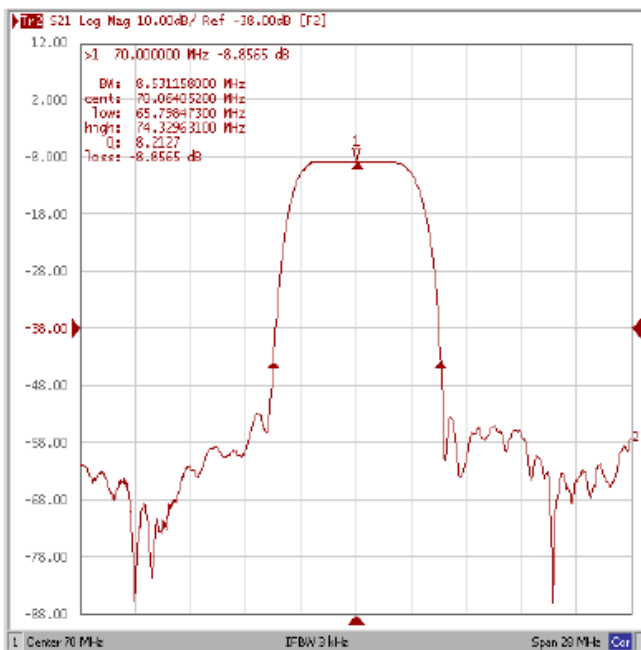
Bandwidth at -1.0 dB



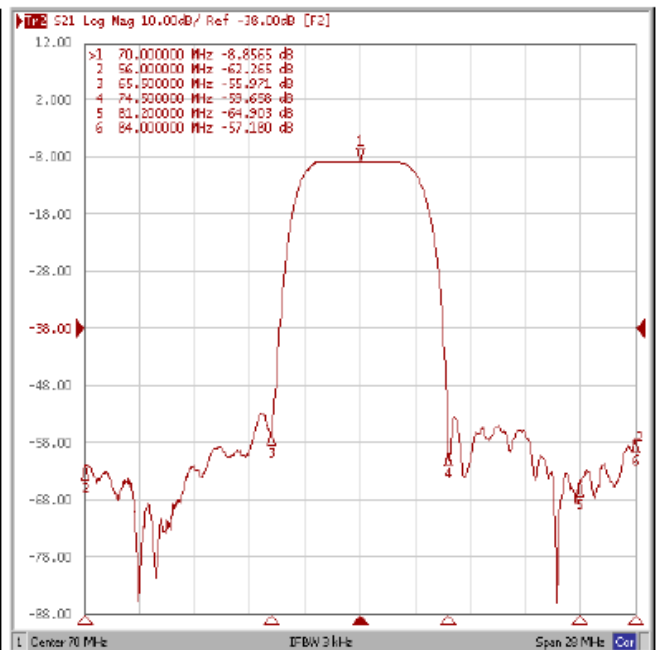
Bandwidth at -3.0 dB



Bandwidth at -35 dB



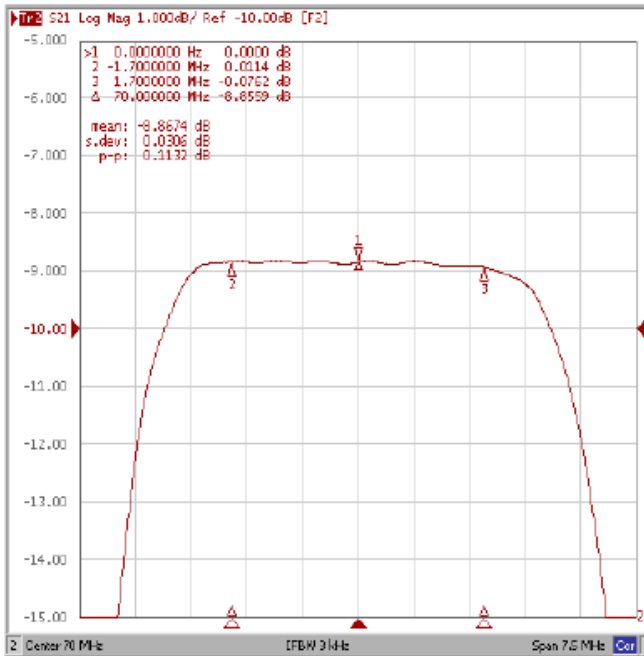
Relative Attenuation



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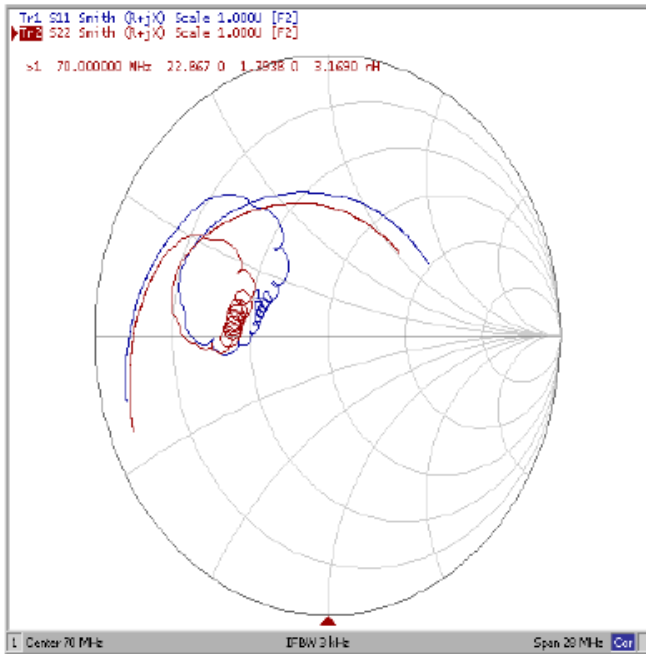
Ripple Variation Fo±1.7MHz



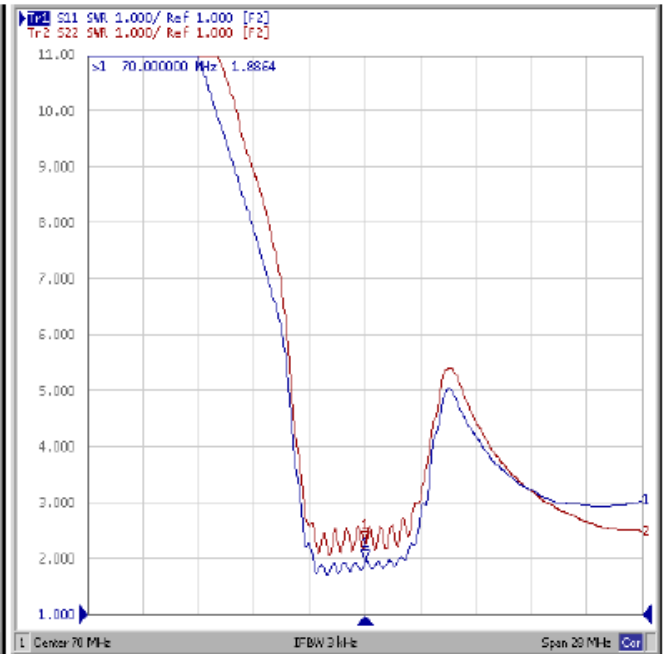
Group Delay Variation Fo±1.7MHz



Smith Chart



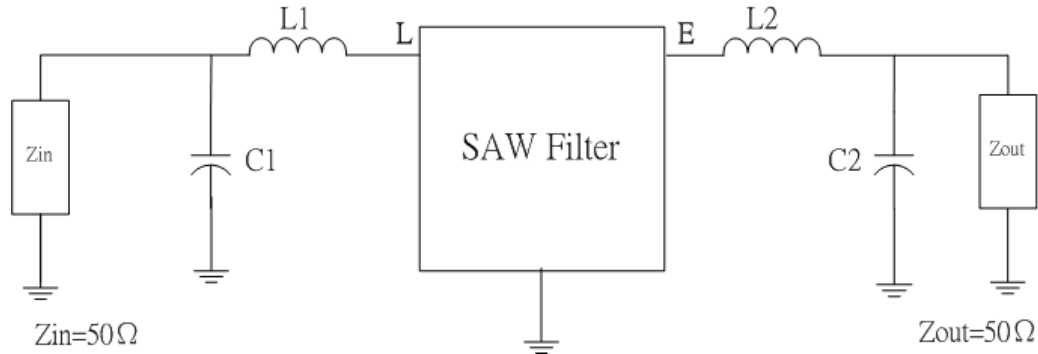
VSWR



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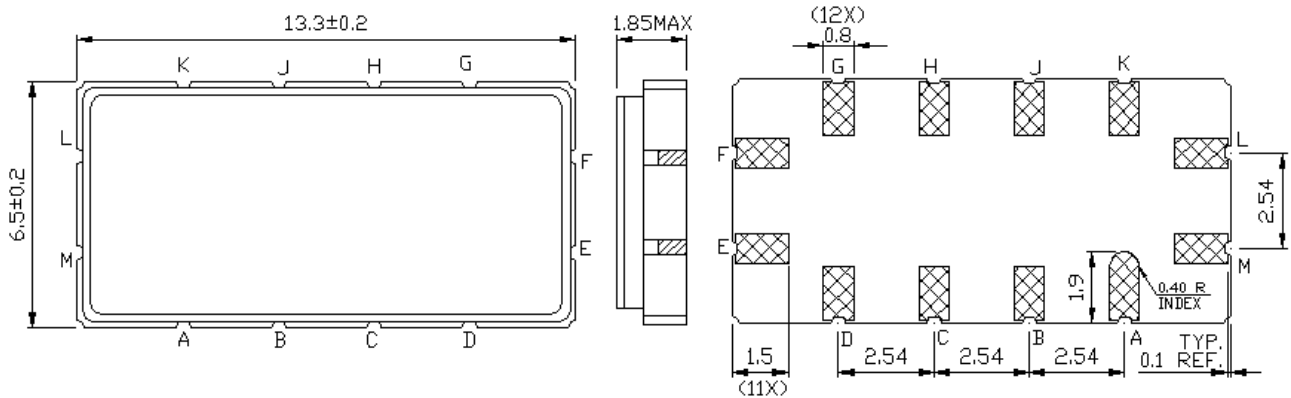
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D. MEASUREMENT CIRCUIT:



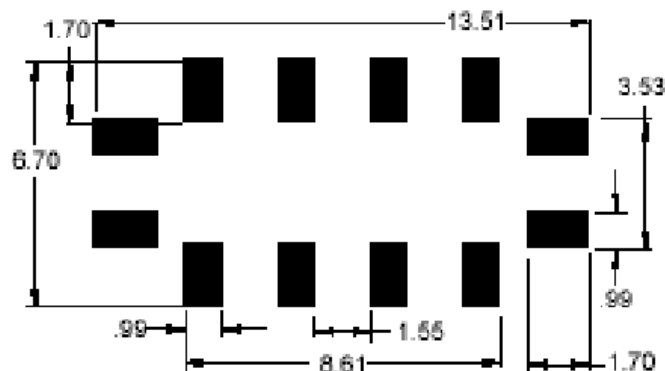
L1=120nH L2=120nH C1=56pF C2=56pF

E. OUTLINE DRAWING:



L: RF Input
 E: RF Output
 Others: To be Ground
 Unit: mm

F. PCB FOOTPRINT:



Unit: mm

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H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 260°C +0/-5°C peak (20 ~ 40 sec).
4. Time: 2 times.

