

**SAW Filter 70.0MHz**

**Model: TB1116A**

**Part No: MP04904**

**Rev No: 1**

**A. MAXIMUM RATING:**

Electrostatic Sensitive Device

1. Input Power Level: 10dBm
2. Storage Temperature: -40°C to 85°C
3. Operating Temperature: -40°C to 85°C
4. Maximum DC Voltage: 10V

**B. CHARACTERISTICS:**

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	70	-
Insertion Loss IL	dB	-	6.6	8.5
2dB bandwidth	MHz	0.18	0.36	-
3dB bandwidth	MHz	0.22	0.40	
5dB bandwidth	MHz		0.43	0.48
15dB bandwidth	MHz		0.53	0.64
30dB bandwidth	MHz		0.78	0.82
40dB bandwidth	MHz		1.3	5.0
Amplitude Ripple Fc ± 80kHz	P-P dB	-	0.5	1.0
Group delay ripple Fc ± 80kHz	nsec	-	500	1500
Relative Attenuation				
10MHz ~ 67.5MHz	dB	40	45	-
72.5MHz ~ 130MHz	dB	40	45	-
Fc -10MHz	dB	50	60	-
Fc +10MHz	dB	50	60	-
Fc -20MHz	dB	60	65	-
Fc +20MHz	dB	60	65	-
Temperature Coefficient	ppm/°C <sup>2</sup>	-0.036		
Source Impedance	Ohm	50		
Load Impedance	Ohm	50		

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**C. FREQUENCY CHARACTERISTICS:**

**1. S21 Narrowband Response**

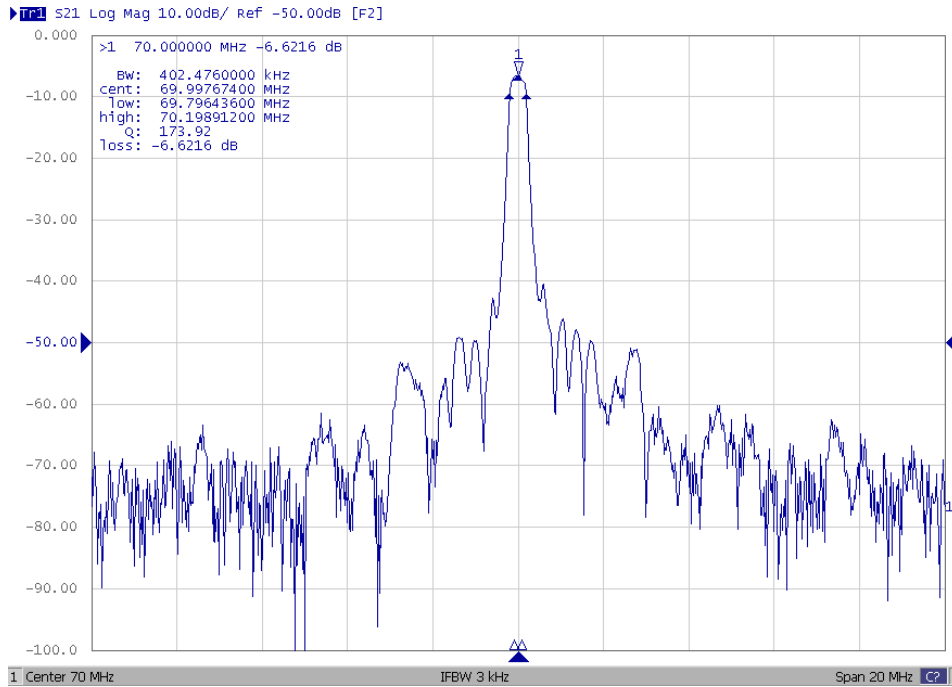


Fig. 1. Horizontal: 2MHz / Div, Vertical: 20Db / Div

**2. S21 Passband Response and Group Delay**

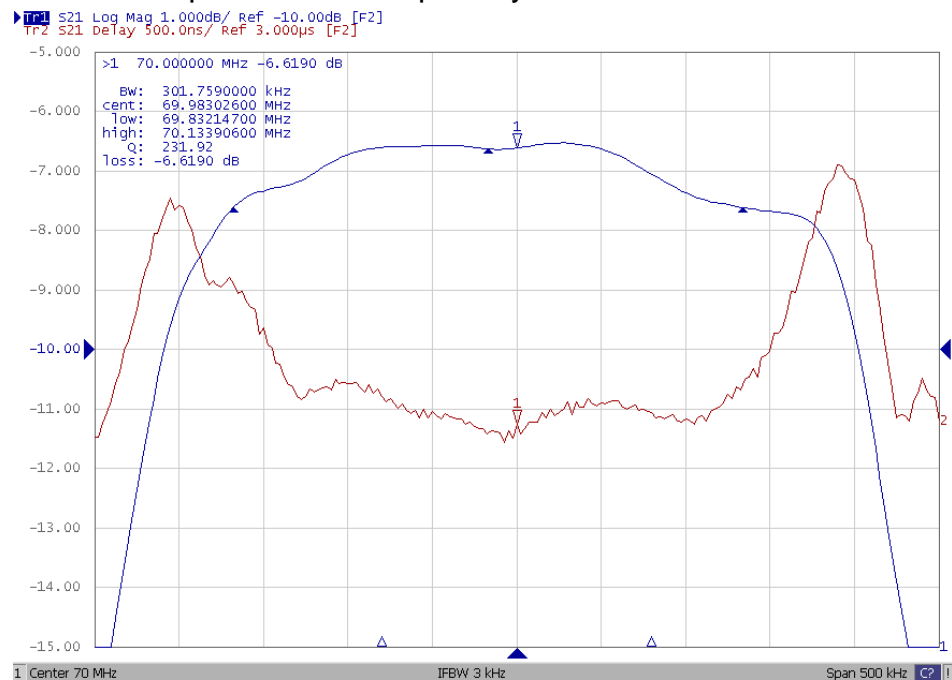
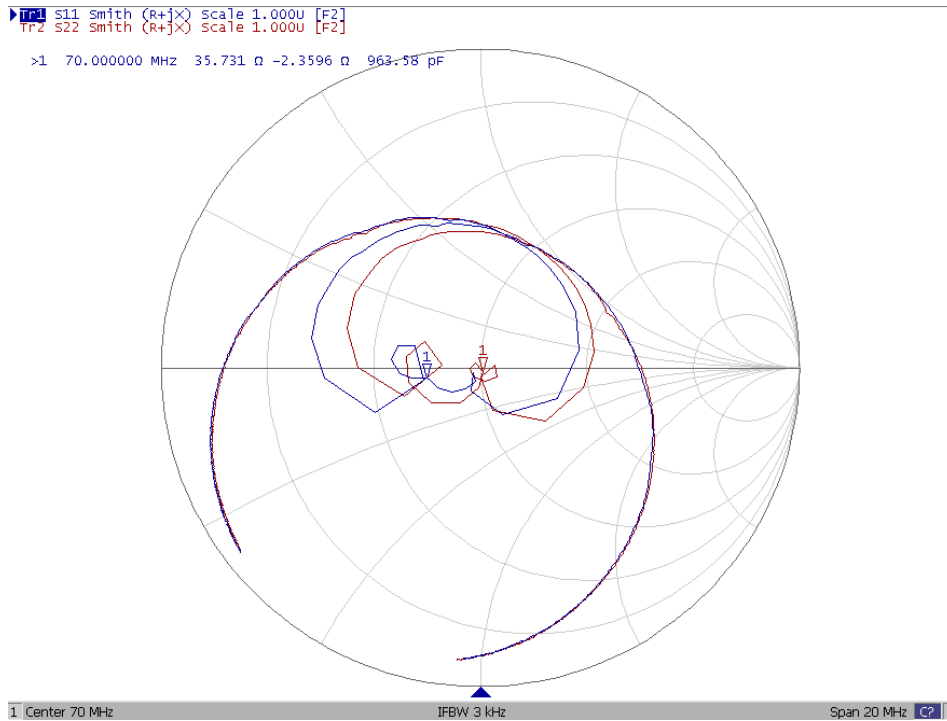


Fig. 2. Horizontal: 0.05MHz / Div, Vertical: 1dB / Div, Vertical: 500ns / Div

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3. Smith Chart



4. S21 Wideband Response

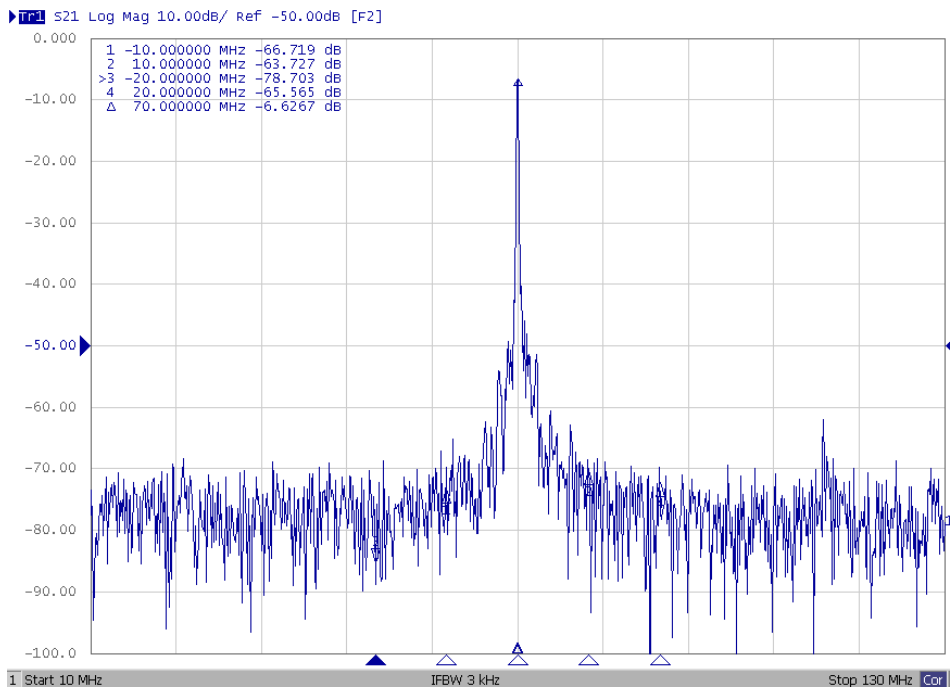
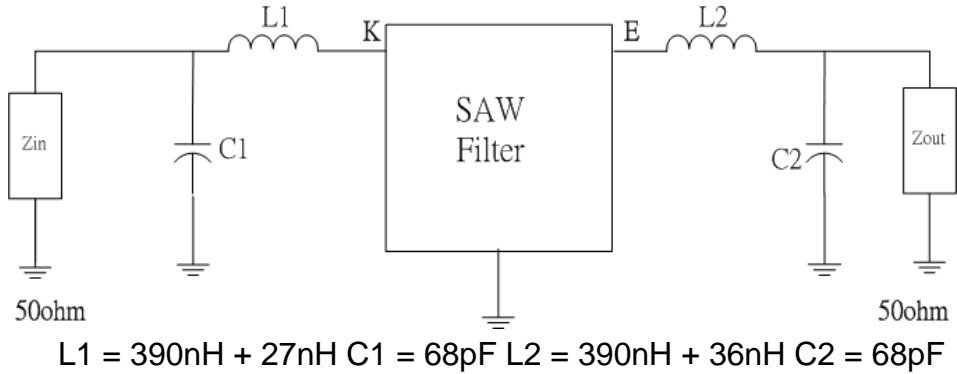


Fig. 4. Horizontal: 12MHz / Div, Vertical: 10dB / Div

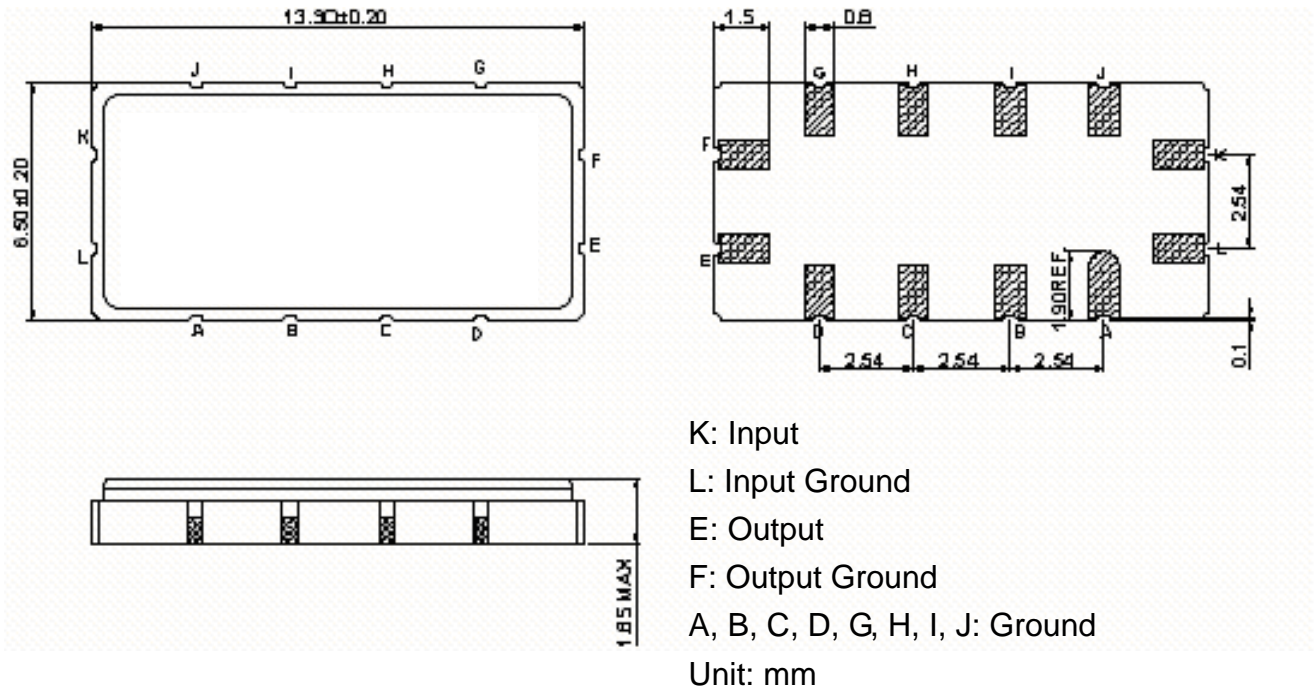
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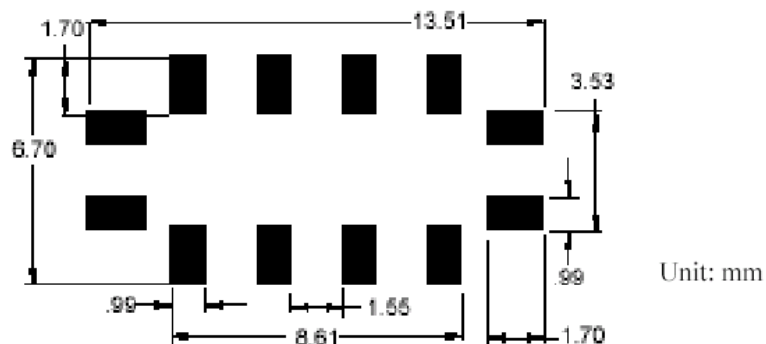
**D. MEASUREMENT CIRCUIT:**



**E. OUTLINE DRAWING:**



**F. PCB FOOTPRINT:**





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**H. RECOMMENDED REFLOW PROFILE:**

