

SAW Filter 70.0MHz
Part No: MP04031

Model: TB1001A
Rev No: 1

A. MAXIMUM RATING:

1. Operating temperature range: -10°C to 70°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 10dBm
4. Maximum DC Voltage: 10V

Electrostatic Sensitive Device

B. CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	69.97	70.00	70.03
Insertion Loss IL	dB	-	17.0	20.0
1dB Bandwidth	MHz	1.25	1.40	-
3dB Bandwidth	MHz	1.4	1.62	-
40dB Bandwidth	MHz	-	2.56	2.66
Relative Attenuation:				
10 to 68.3MHz	dB	40	50	-
71.7 to 140MHz	dB	40	45	-
Amplitude ripple within Fc ± 0.5MHz	dB	-	0.60	1.0
Phase Linearity within Fc ± 0.5MHz	°ms	-	1.0	2.00
Absolute Delay	usec	-	2.6	-
Substrate Material	-	-	Quartz	-

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C. FREQUENCY CHARACTERISTICS:

1. Wide band Response: (span 20MHz)

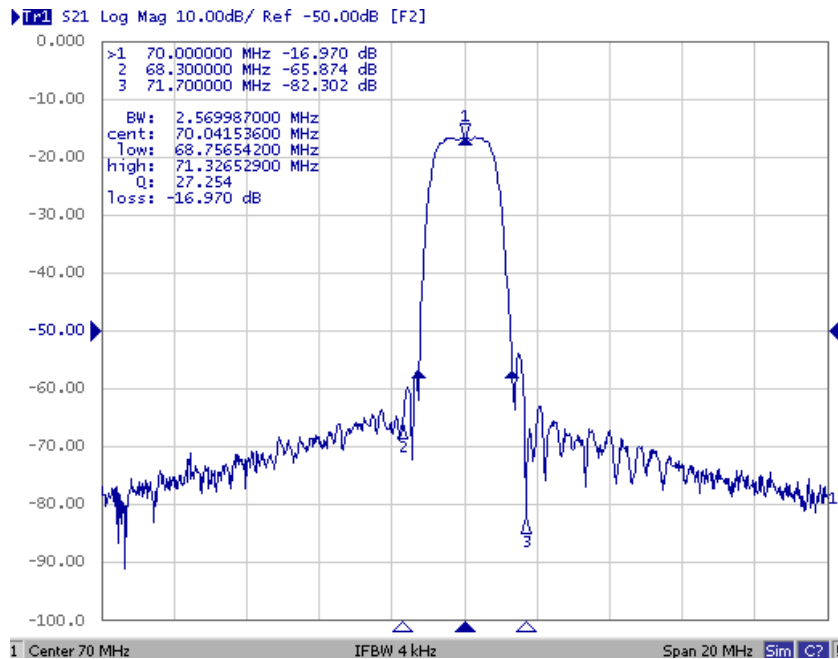


Fig. 1. Horizontal: 2MHz/Div, Vertical: 10dB/Div

2. Pass band Response and Group Time Delay response:

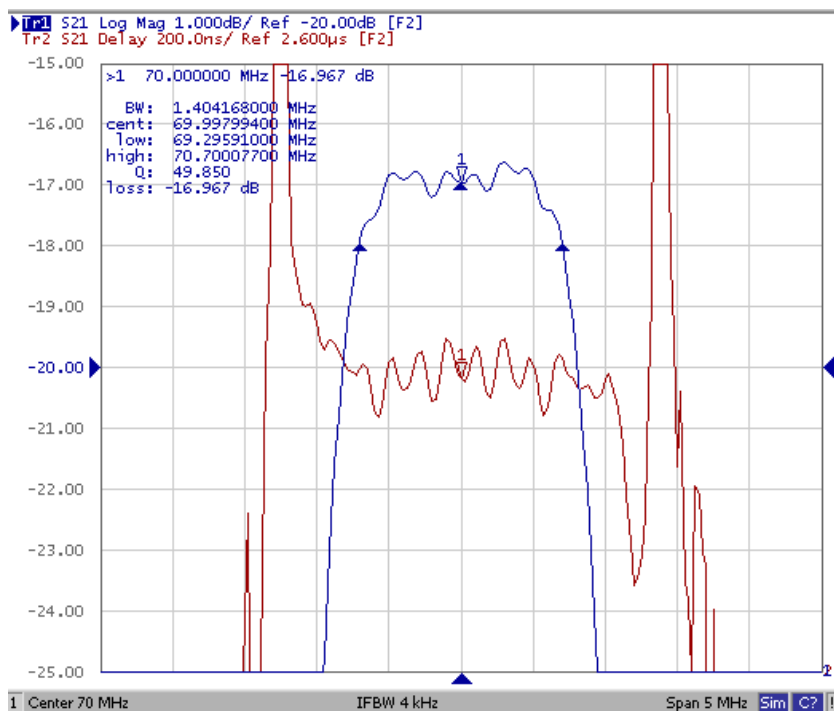
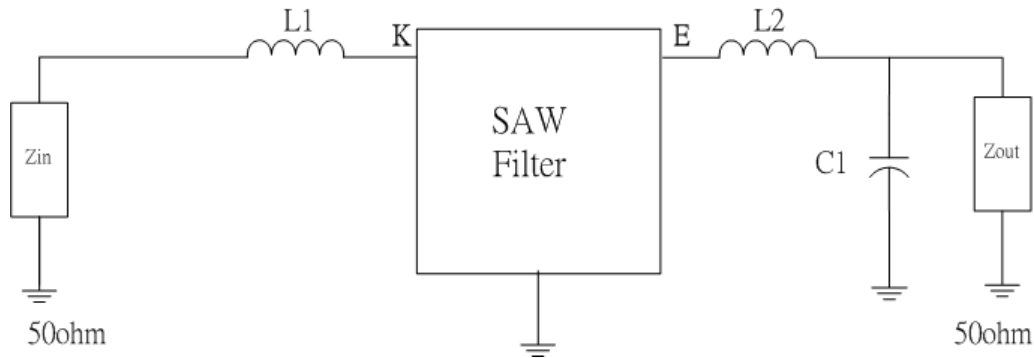


Fig. 2. Horizontal: 0.5MHz/Div, Vertical: 1dB/Div, Vertical: 200ns/Div

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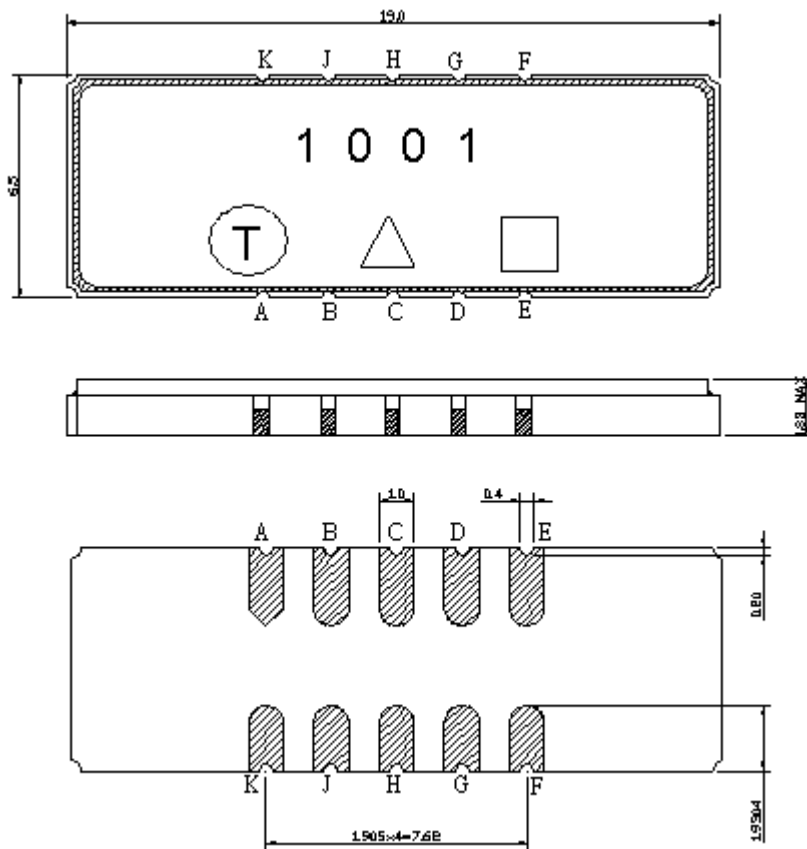
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D. MATCHING CIRCUIT:



$L1 = 560\text{nH}$, $L2 = 470\text{nH} + 68\text{nH}$, $C1 = 82\text{pF}$

E. OUTLINE DRAWING:

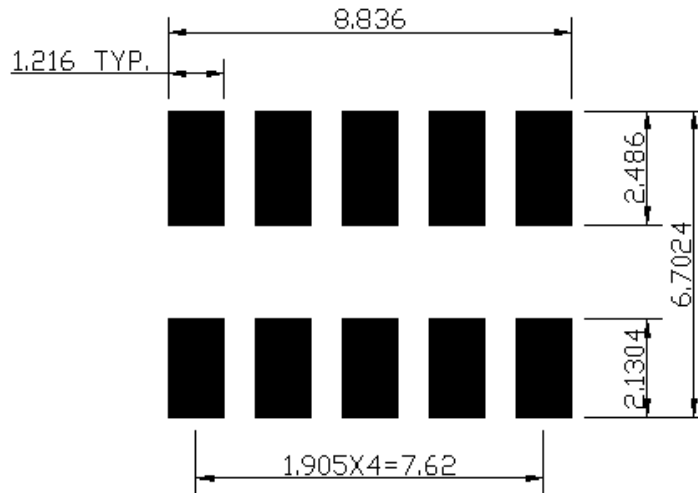


- K: Input
 - A: Input Ground
 - E: Output
 - F: Output Ground
 - B, C, D, G, H, J: Ground
- Unit: mm

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F. PCB FOOTPRINT:

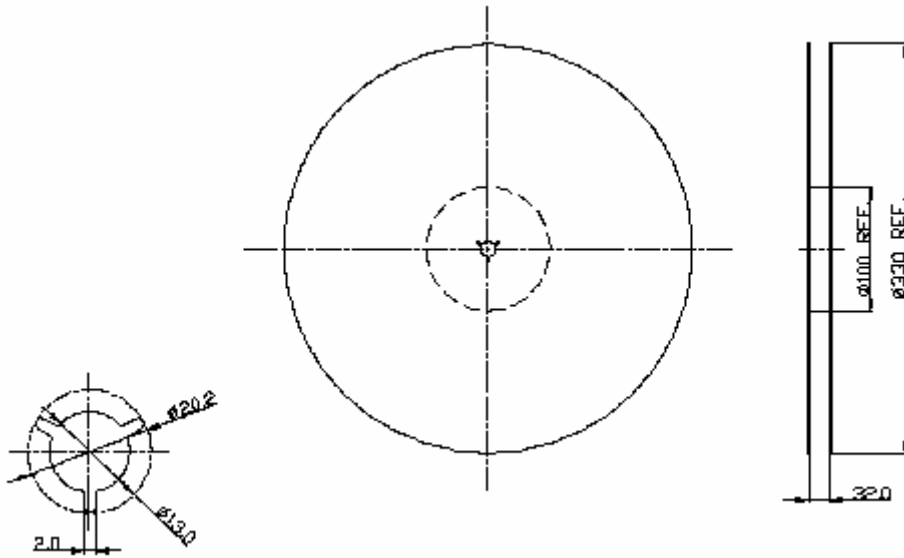


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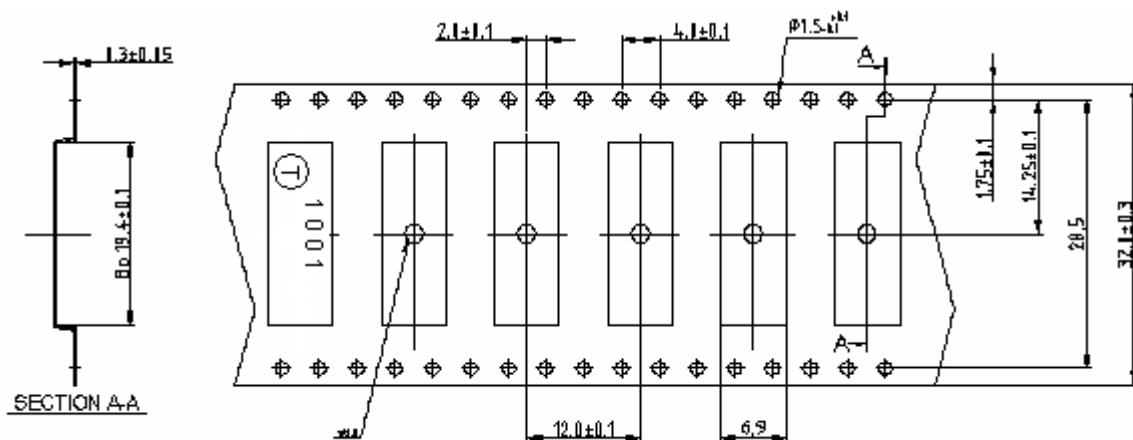
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G. PACKING:

1. Reel Dimension



2. Tape Dimension



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H. RECOMMENDED REFLOW PROFILE:

