

SAW Filter 160.0MHz

Model: TB0960A

Part No: MP05611

Rev No: 1

A. MAXIMUM RATING:

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

B. CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	160	-
Insertion Loss IL	dB	-	10.5	12.0
-1dB bandwidth	MHz	12.0	12.4	-
-40dB bandwidth	MHz	-	17.8	18.5
Passband Ripple Fc ± 4.8MHz	dB	-	0.6	1.0
Group Delay Ripple Fc ± 4.8MHz	ns	-	100	120
Absolute Delay at Fc	us	-	0.9	1.5
Attenuation (Reference level from minimum Insertion loss)				
DC ~ 135MHz	dB	50	63	-
185 MHz ~ 450MHz	dB	50	62	-
Temperature Coefficient	ppm/°C	-	-23	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

SAW Filter 160.0MHz
Part No: MP05611

Model: TB0960A
Rev No: 1

C. FREQUENCY CHARACTERISTICS:

1. Wide band Response: (span 100MHz)

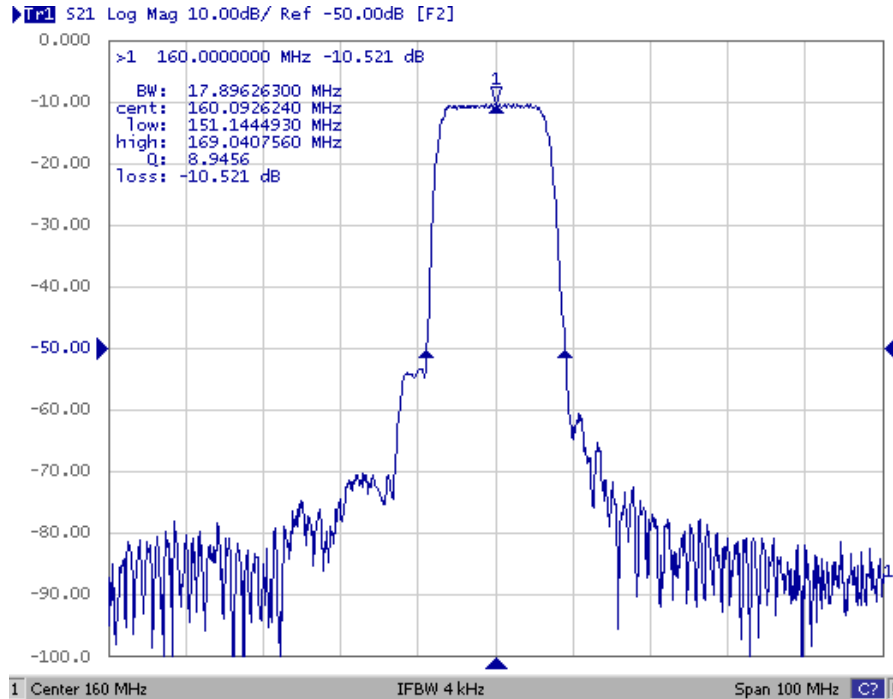


Fig. 1. Horizontal: 10MHz / Div, Vertical: 10Db / Div

2. Pass band Response and Group Time Delay response:

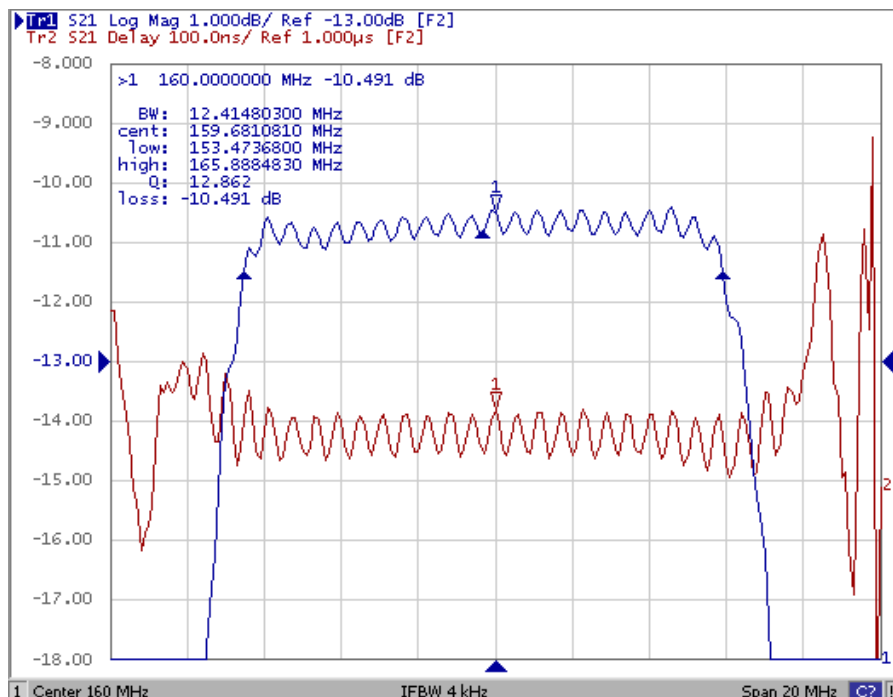


Fig. 2. Horizontal: 2MHz / Div, Vertical: 1dB / Div, Vertical: 100ns / Div

SAW Filter 160.0MHz
Part No: MP05611

Model: TB0960A
Rev No: 1

3. Wide band Response:

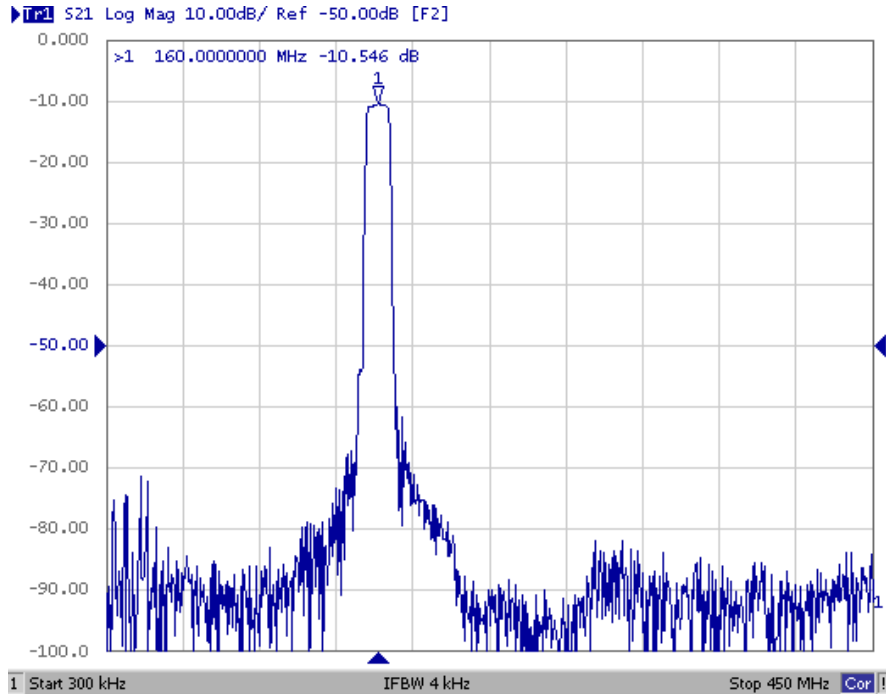
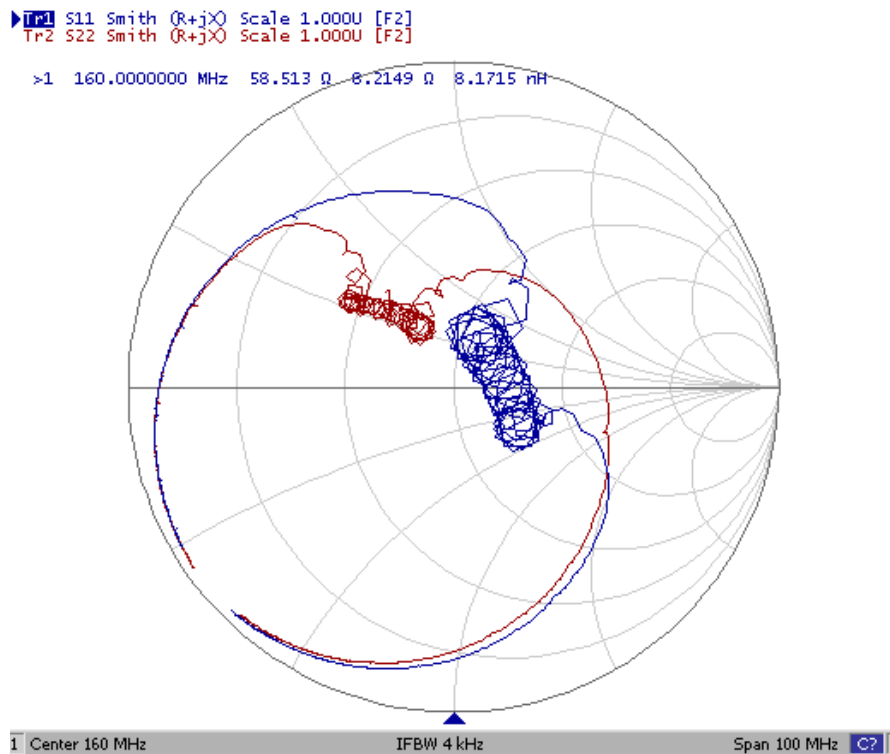


Fig. 3. Horizontal: 80MHz / Div, Vertical: 10dB / Div

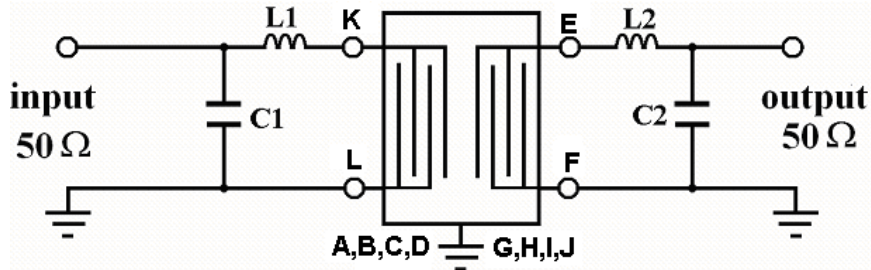
4. Smith Chart:



SAW Filter 160.0MHz
Part No: MP05611

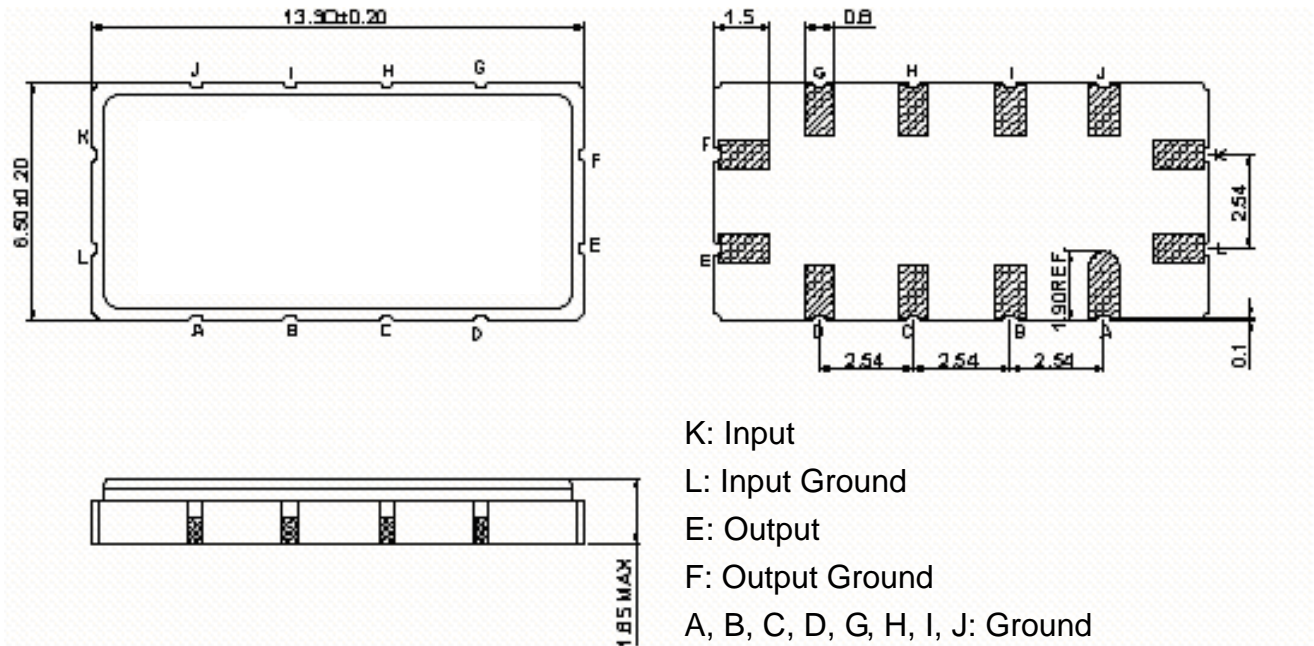
Model: TB0960A
Rev No: 1

D. MATCHING CIRCUIT:



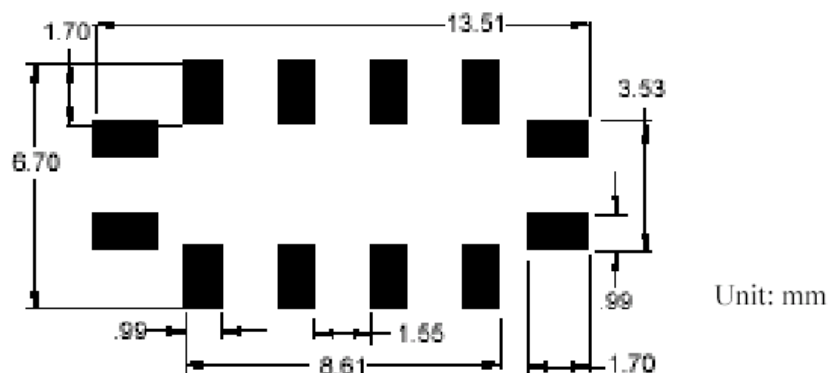
$L1 = 68\text{nH}$, $C1 = 47\text{pF}$, $L2 = 68\text{nH}$, $C2 = 47\text{pF}$

E. OUTLINE DRAWING:



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

F. PCB FOOTPRINT:



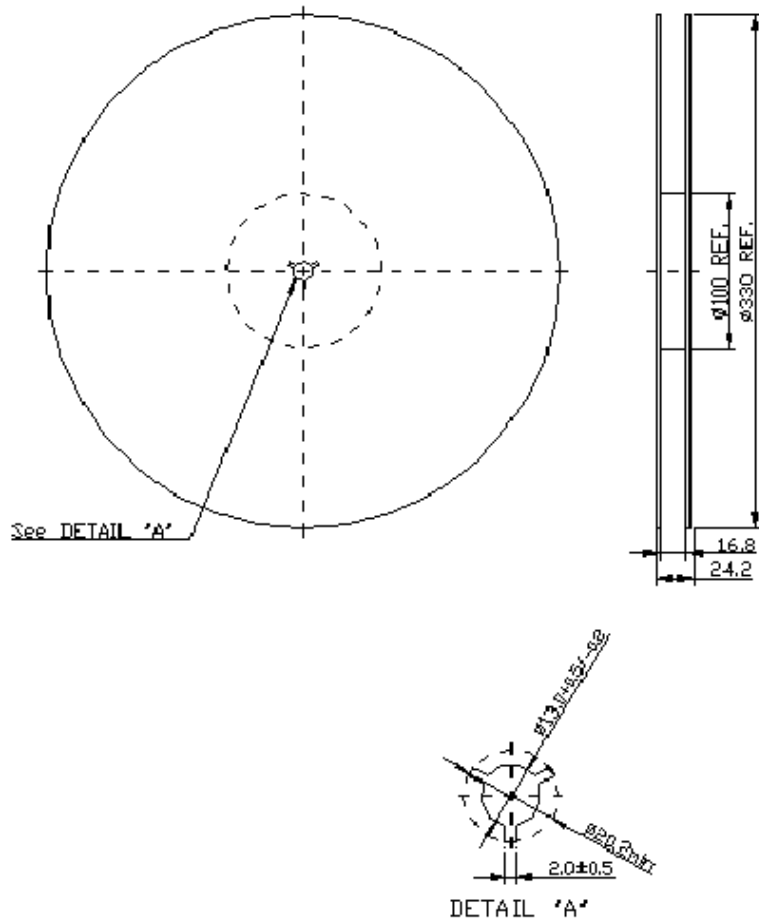
Unit: mm

SAW Filter 160.0MHz
Part No: MP05611

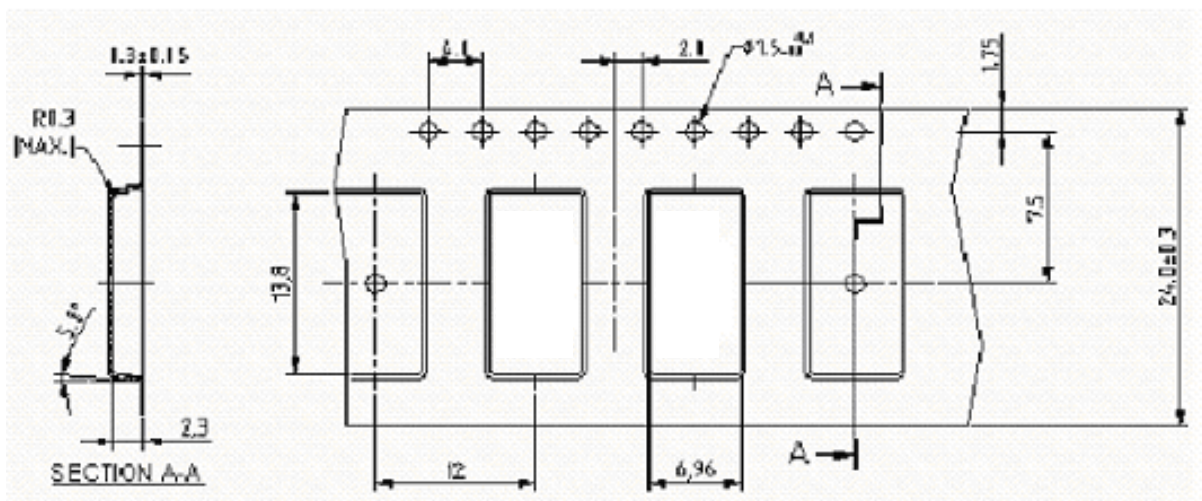
Model: TB0960A
Rev No: 1

G. PACKING:

1. Reel Dimension



2. Tape Dimension



SAW Filter 160.0MHz
Part No: MP05611

Model: TB0960A
Rev No: 1

H. RECOMMENDED REFLOW PROFILE:

