

SAW Filter 140.0MHz
Part No: MP07542

Model: TB1149A
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device

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:

Ambient Temperature: 25°C

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	140	-
Insertion Loss IL	dB	-	8.7	12
0.5dB Band Width	MHz	-	6.0	-
1dB Band Width	MHz	5.6	6.4	-
38dB Band Width	MHz	-	9.6	10.5
Passband Ripple Fc ± 2.7MHz	dB	-	0.2	1.0
Absolute group Delay	us	-	1.0	-
Group Delay variation Fc ± 2.7MHz	ns	-	30	60
Temperature Coefficient	ppm/°C	-	-23	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

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C. FREQUENCY CHARACTERISTICS:

1. Wide band Response:

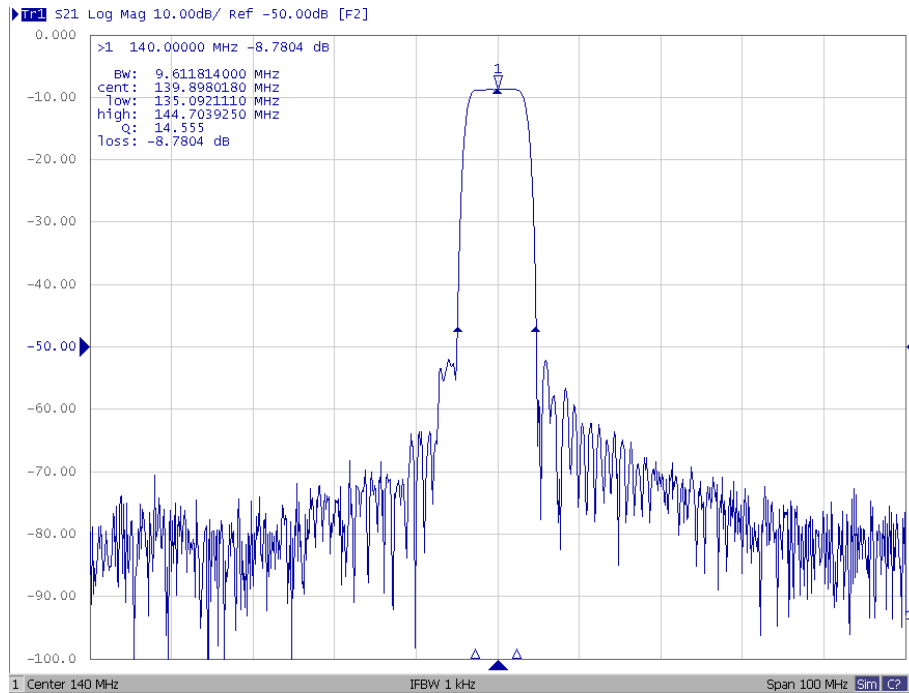


Fig. 1. Horizontal: 10MHz / Div, Vertical: 10Db / Div

2. Pass band Response and Group Delay Response:

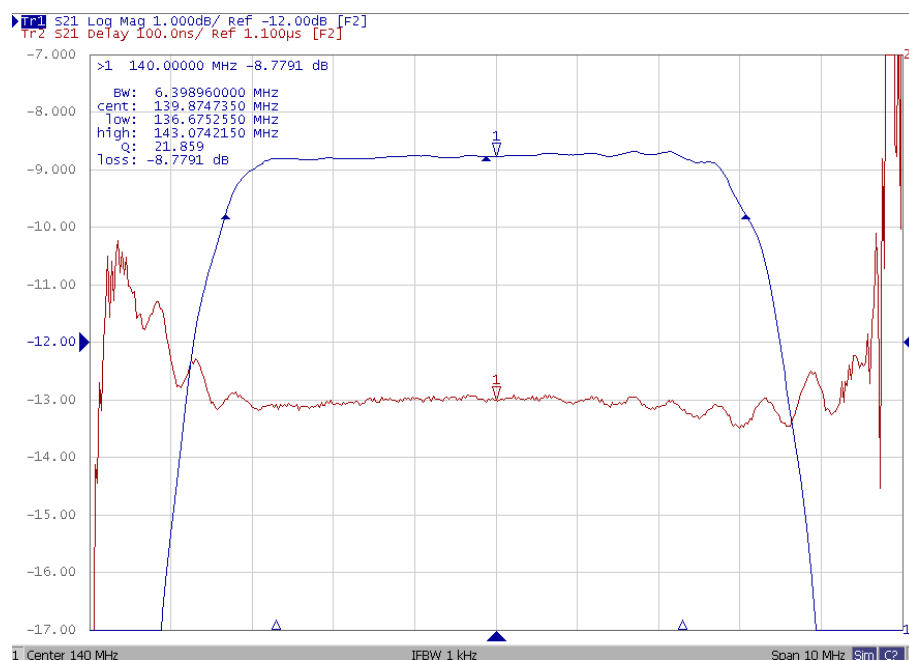
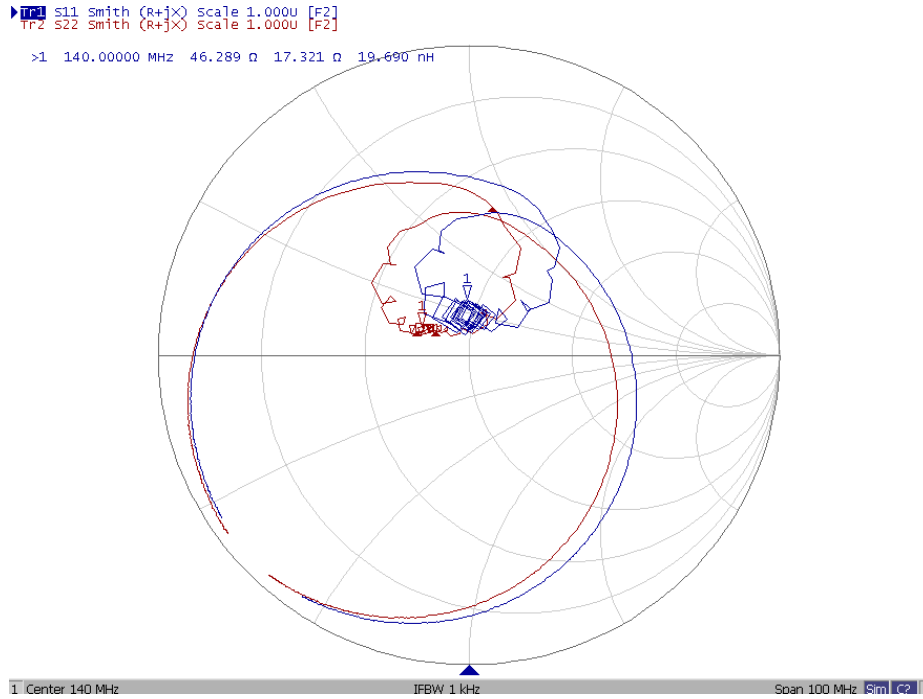


Fig. 2. Horizontal: 1MHz / Div, Vertical: 1dB / Div, Vertical: 100ns / Div

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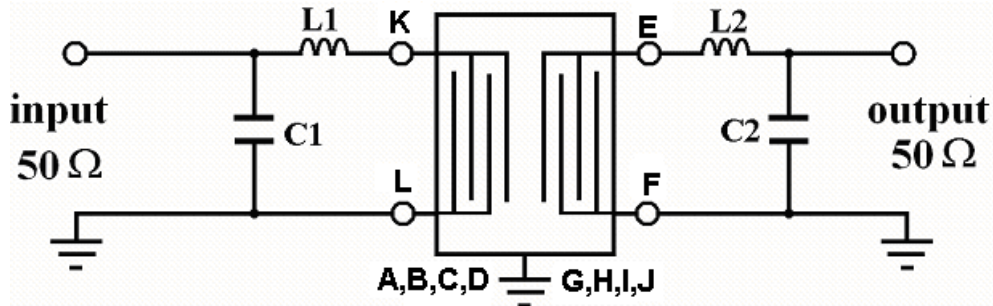
3. Smith Chart:



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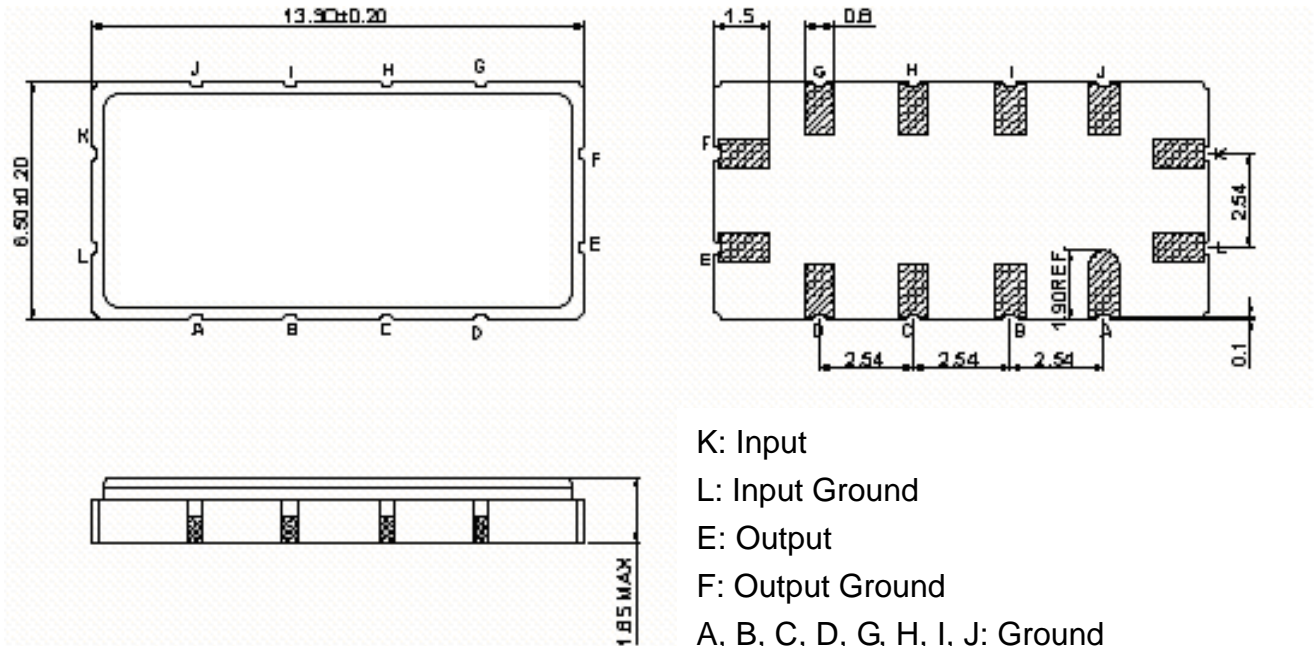
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D. MATCHING CIRCUIT:



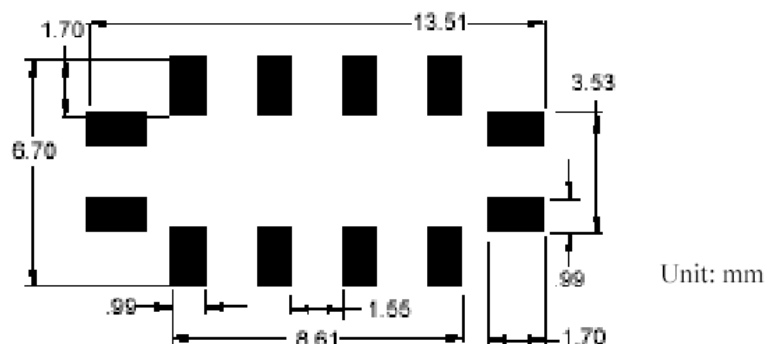
$L1 = 68\text{nH}$, $C1 = 56\text{pF}$, $L2 = 82\text{nH}$, $C2 = 43\text{pF}$

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:



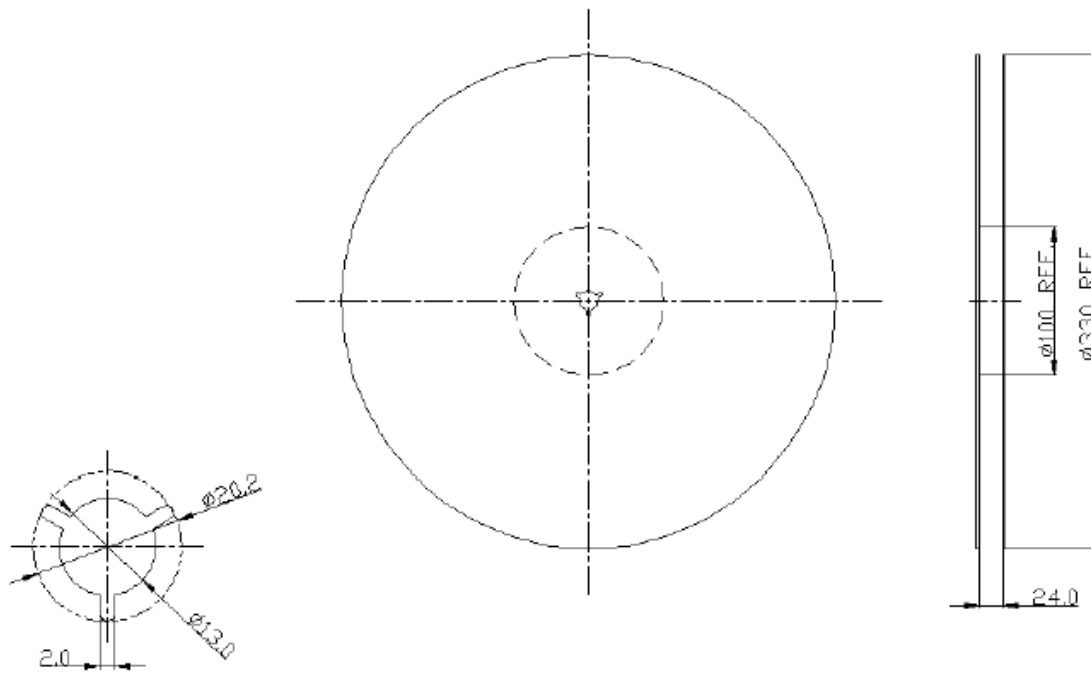
Unit: mm

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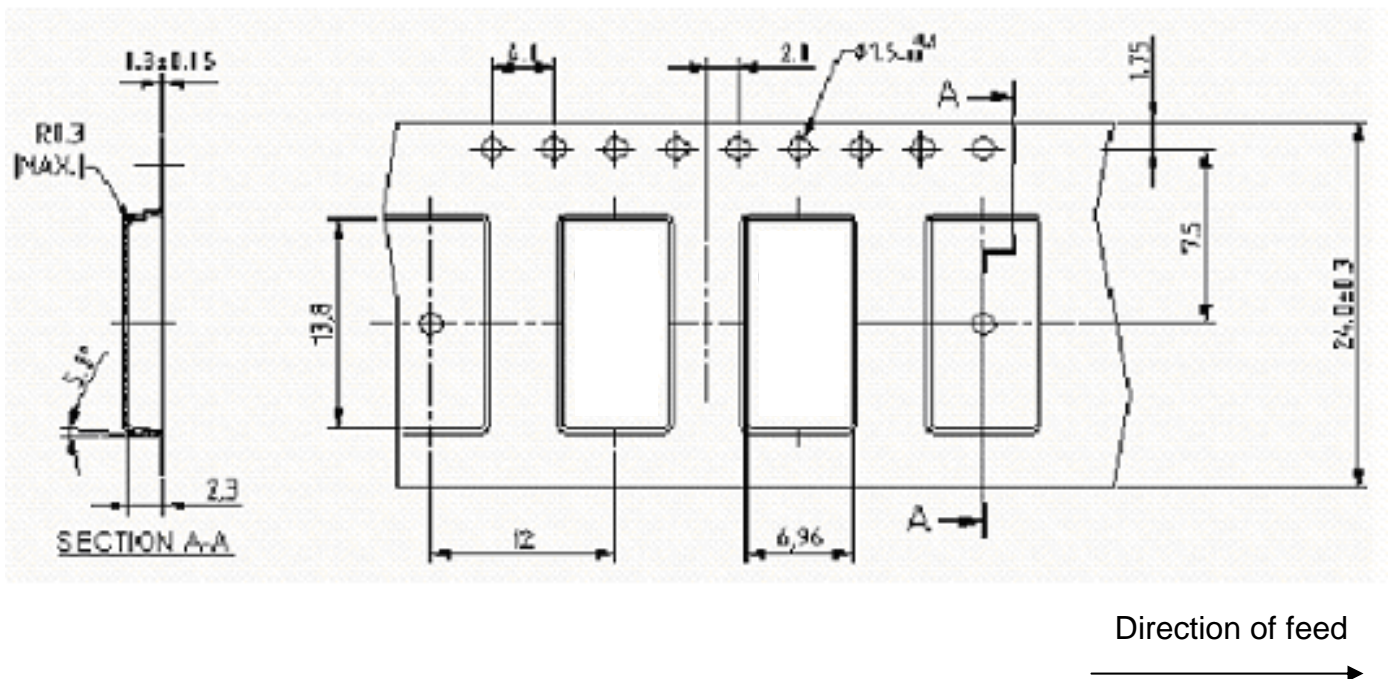
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G. PACKING:

1. Reel Dimension (Please refer to FR-75D10 for packing quantity)



2. Tape Dimension



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H. RECOMMENDED REFLOW PROFILE:

