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Golledge Electronics Ltd
Eaglewood Park, ILMINSTER
Somerset, TA19 9DQ, UK

SAW Filter 169.040MHz — Model: TB1006A
Part No: MP05863 — Rev No: 1

A. MAXIMUM RATING:

Electrostatic **S**ensitive **D**evice

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

B. CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	169.04	-
Insertion Loss IL	dB	-	7.2	10.0
-1dB bandwidth	MHz	10.8	12	-
-3dB bandwidth	MHz	-	13.4	-
-40dB bandwidth	MHz	-	17.7	18.3
Passband Ripple Fc ± 4.85MHz	dB	-	0.4	1.0
Group Delay variation Fc ± 4.85MHz	nsec	-	45	80
Absolute Delay	unec	-	0.68	-
Ultimate	dB	40	60	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

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C. FREQUENCY CHARACTERISTICS:

1. Wide band Response: (span 200MHz) (Typical performance at 25°C)

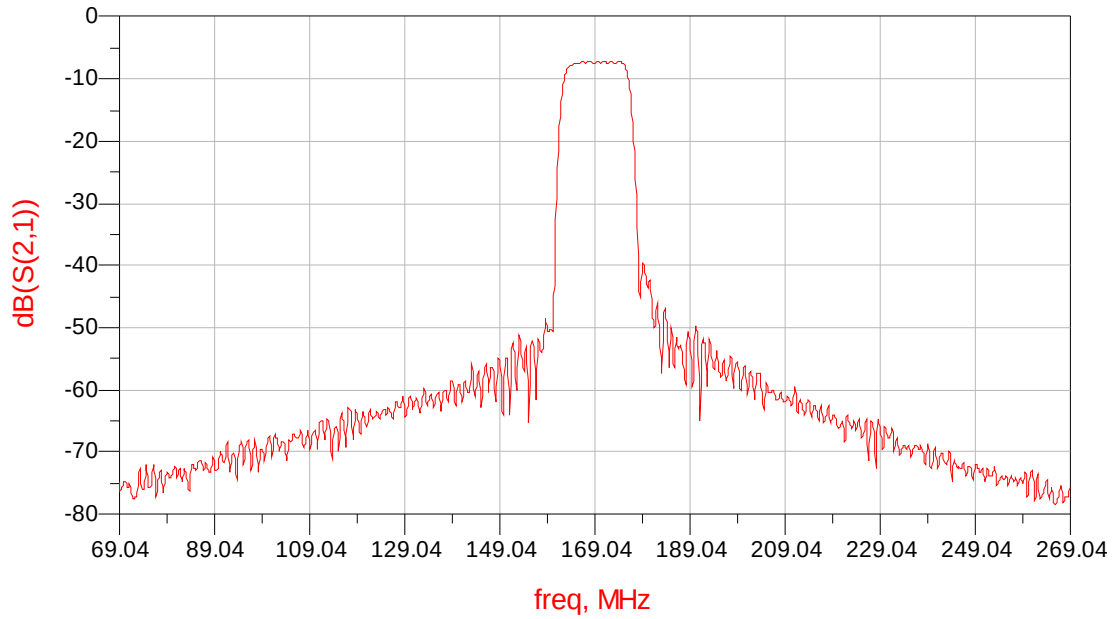


Fig. 1. Horizontal: 20MHz / Div, Vertical: 10Db / Div

2. Pass band Response and Group Time Delay response:

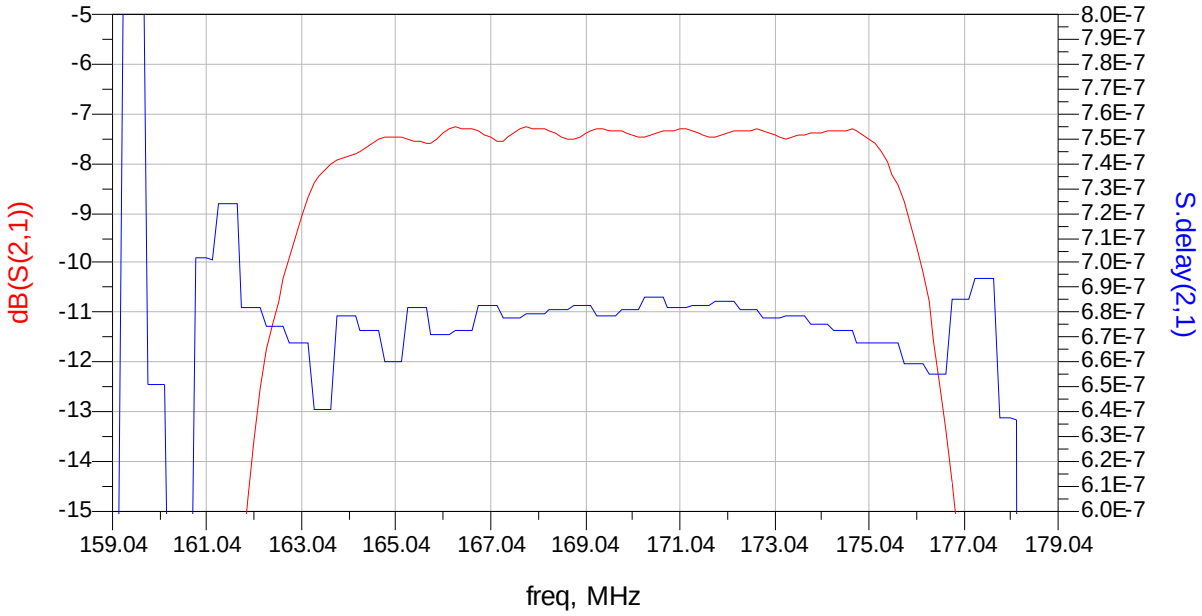
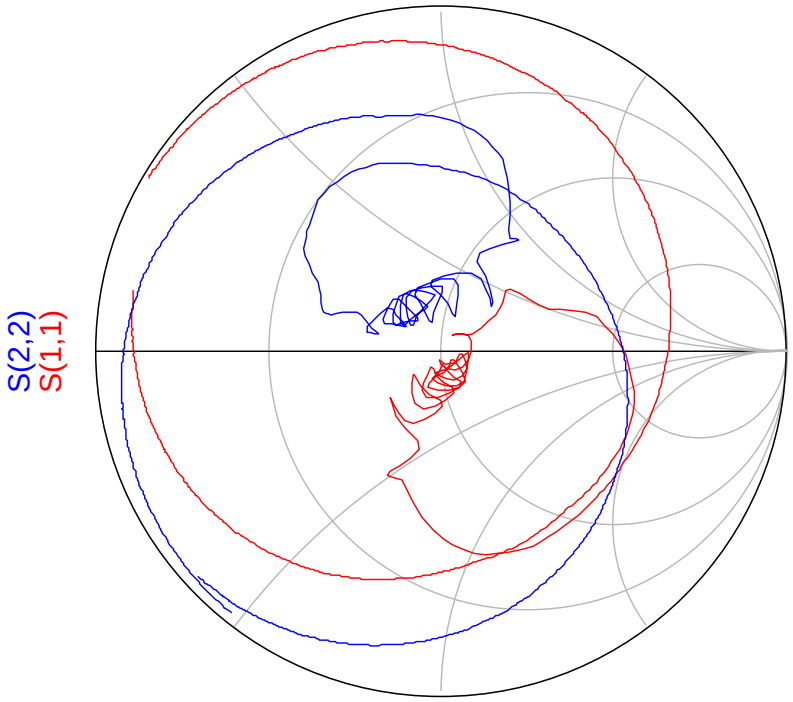


Fig. 2. Horizontal: 2MHz / Div, Vertical: 1dB / Div, Vertical: 100ns / Div

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3. Smith Chart:



freq (69.04MHz to 269.0MHz)

4. Wide Band Response:

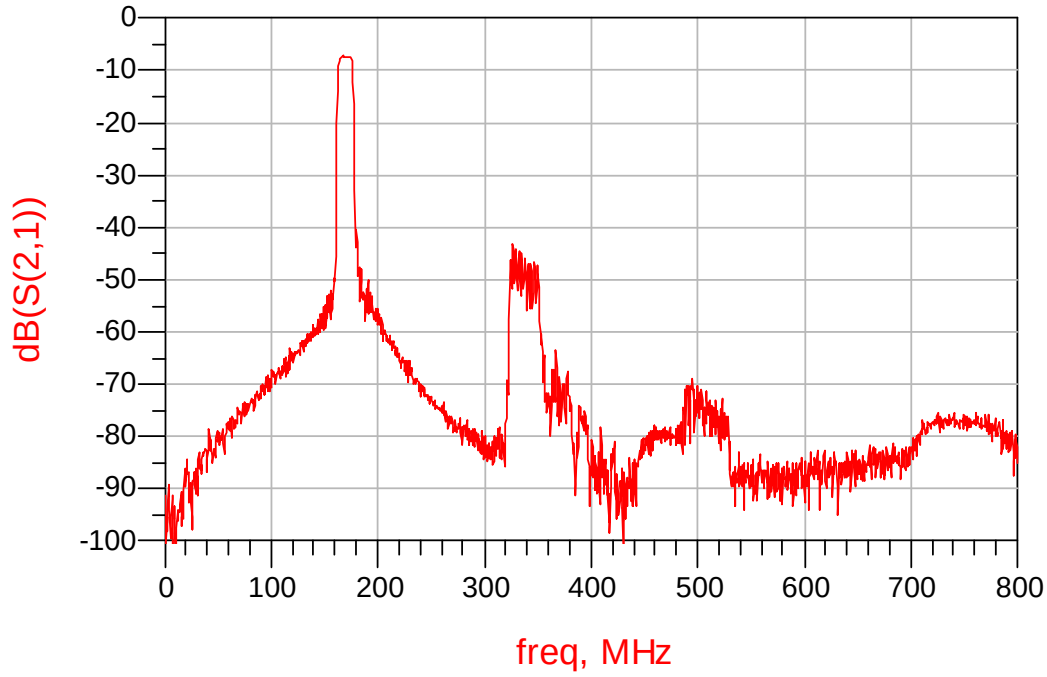
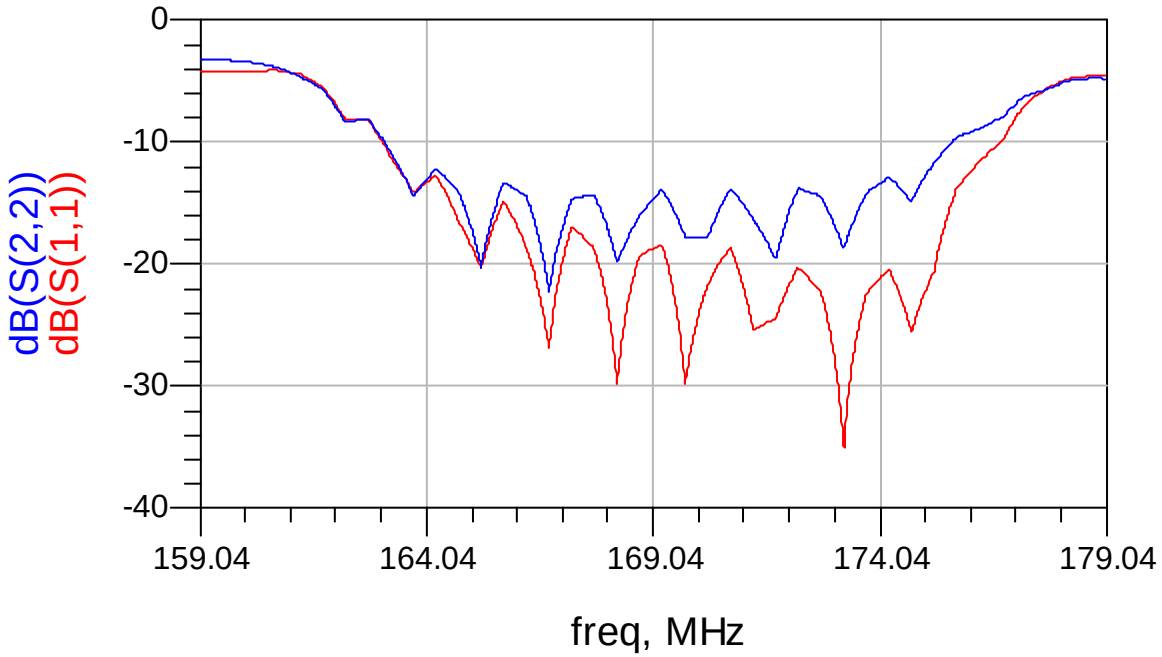


Fig. 4. Horizontal: 80MHz / Div, Vertical: 10dB / Div

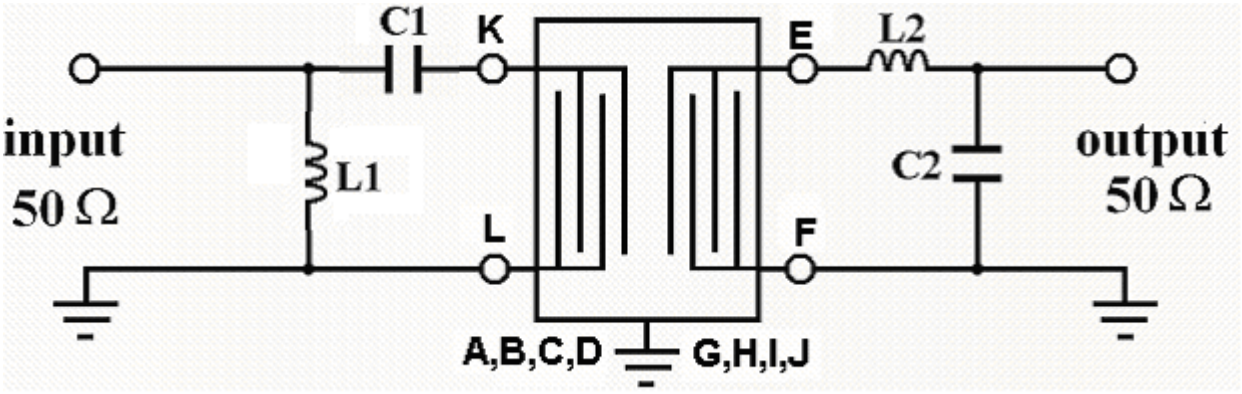
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5. Reflection Functions:



D. MATCHING CIRCUIT:

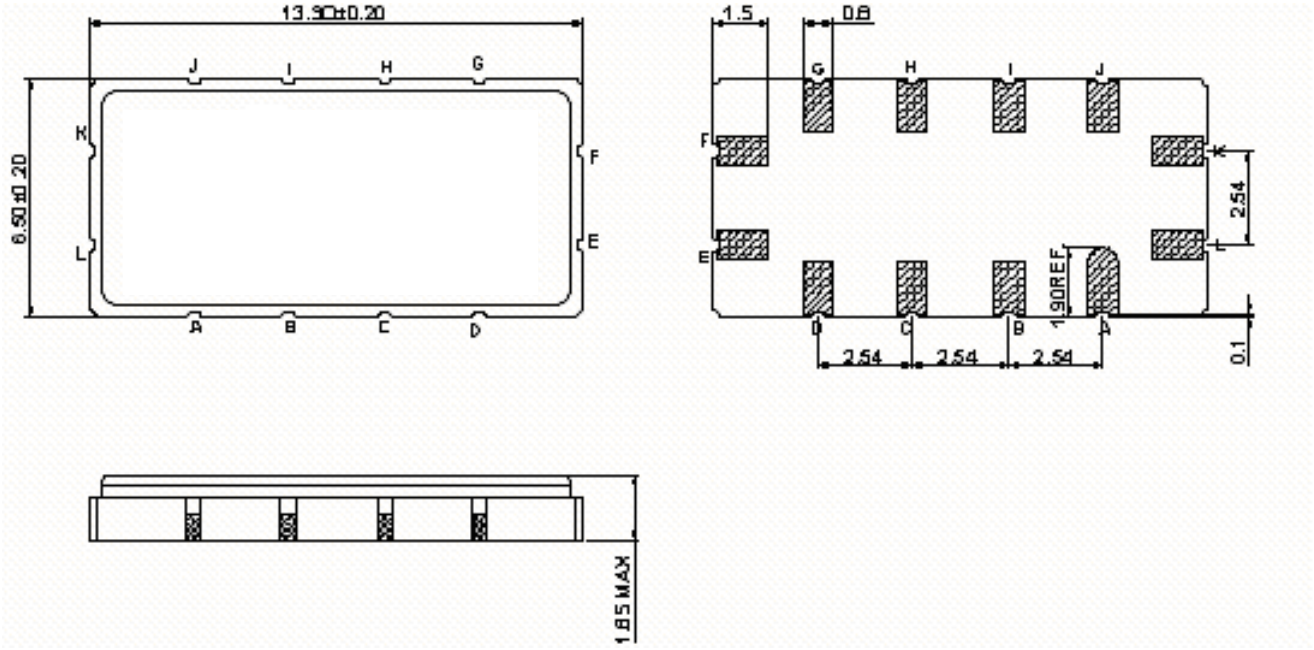


L1 = 24nH C1 = 68pF L2 = 27nH C2 = 36pF

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E. OUTLINE DRAWING:



K: Input

L: Input Ground

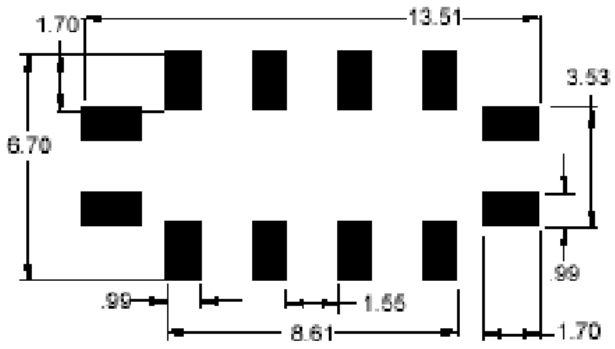
E: Output

F: Output Ground

A, B, C, D, G, H, I, J: Ground

Unit: mm

F. PCB FOOTPRINT:



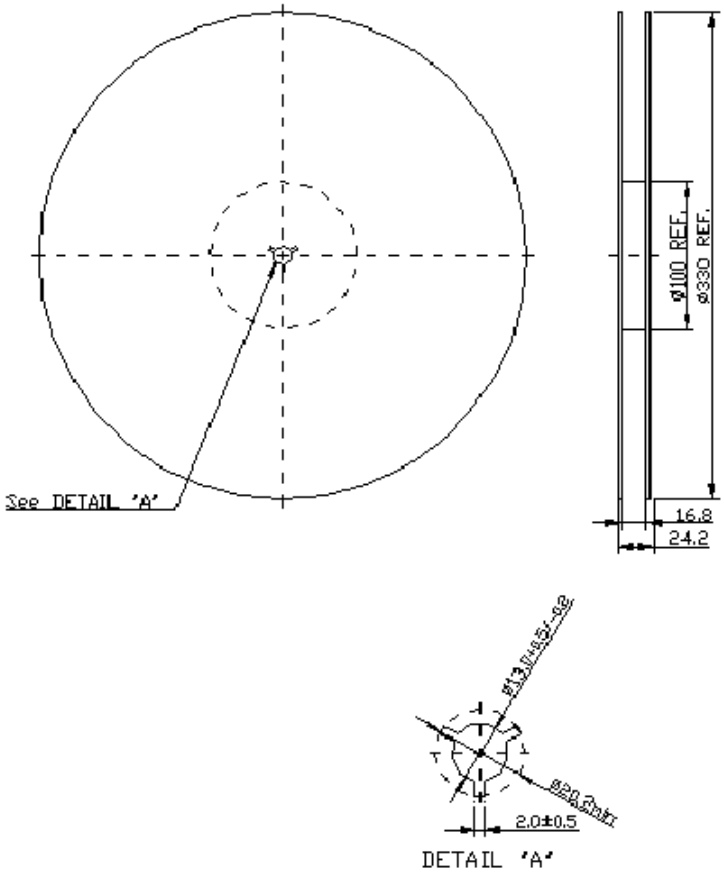
Unit: mm

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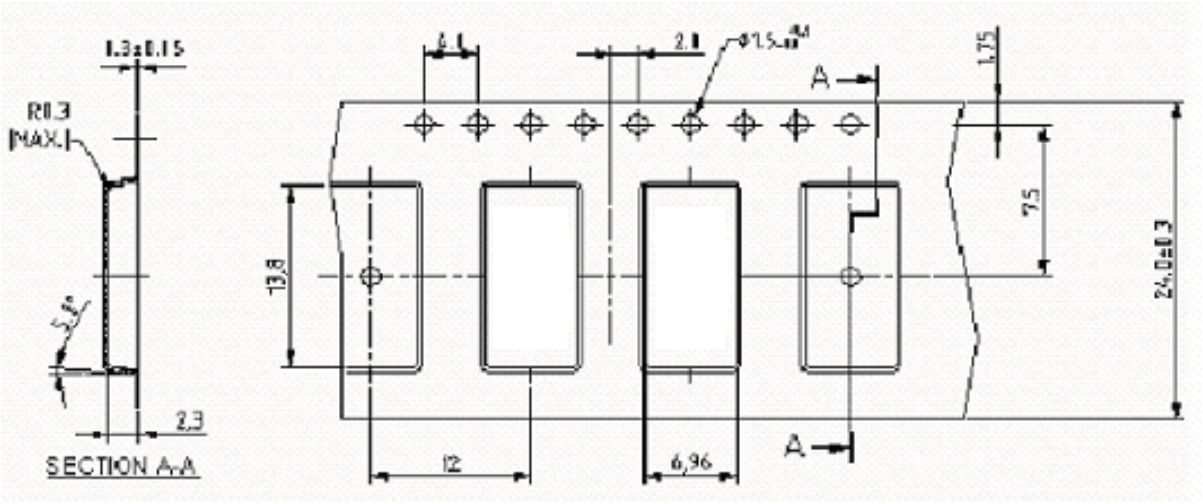
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G. PACKING:

1. Reel Dimension



2. Tape Dimension



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H. RECOMMENDED REFLOW PROFILE:

