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

SAW Filter 340.50MHz **Model: TB0970A**

Part No: MP05889 **Rev No: 2**

A. MAXIMUM RATING:

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

1. Operating temperature range: -30°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 10dBm
4. Maximum DC Voltage: 10V

B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	340.5	-
Insertion Loss IL	dB	-	11.7	14.0
-1dB bandwidth	MHz	55	59	-
-40dB bandwidth	MHz	-	74.5	80.0
Passband Ripple Fc ±25MHz	dB	-	0.4	1.0
Attenuation:(Reference level from Min IL)				
DC ~ 240MHz	dB	45	55	-
240MHz ~ 275MHz	dB	40	50	-
405MHz ~ 440MHz	dB	40	52	-
440MHz ~ 600MHz	dB	45	58	-
600MHz ~ 760MHz	dB	35	45	-
760MHz ~ 1000MHz	dB	45	65	-
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 400MHz)

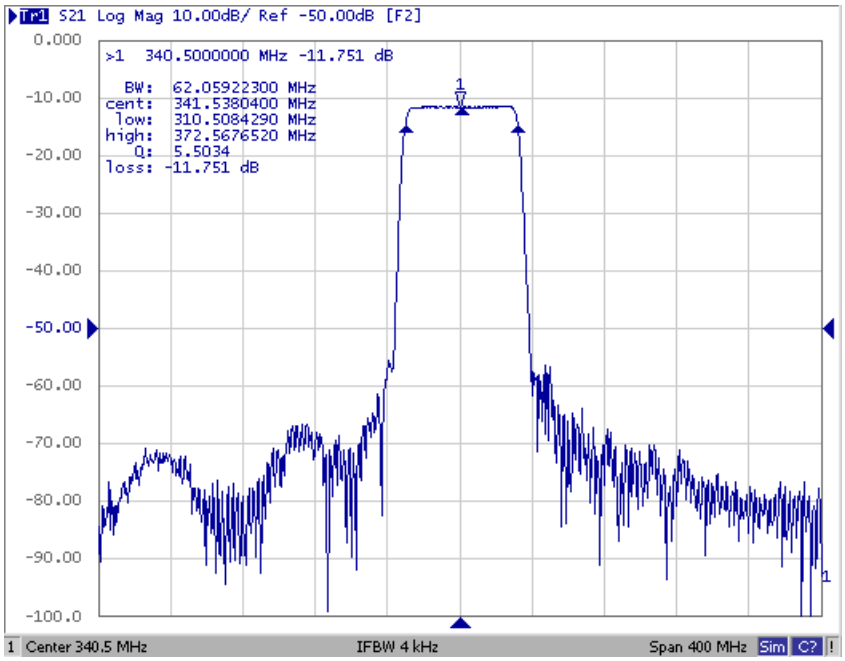

Fig. 1. Horizontal: 40MHz / Div, Vertical: 10dB / Div

2. Pass band Response and Group Time Delay response:

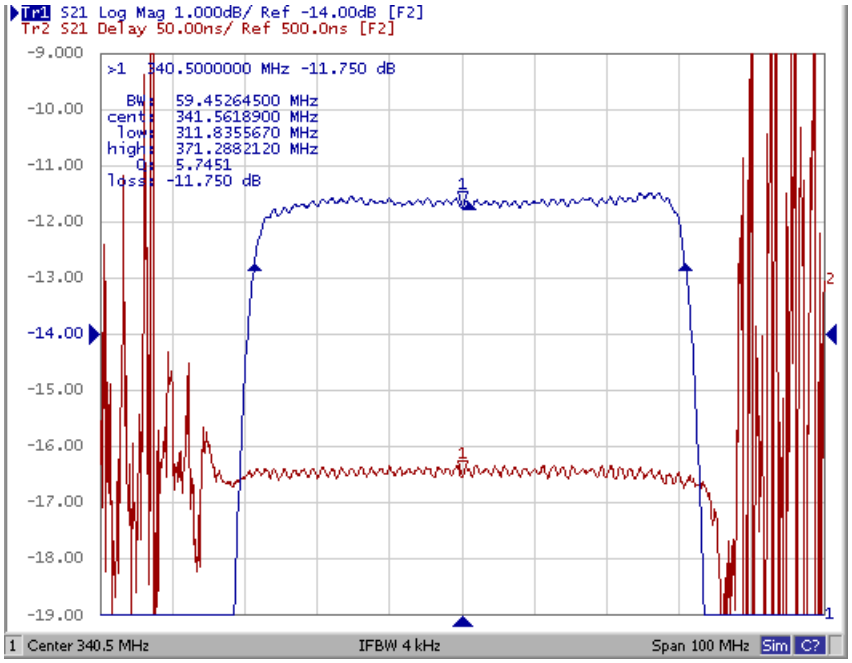

Fig. 2. Horizontal: 10MHz / Div, Vertical: 1dB / Div, Vertical: 50ns / Div

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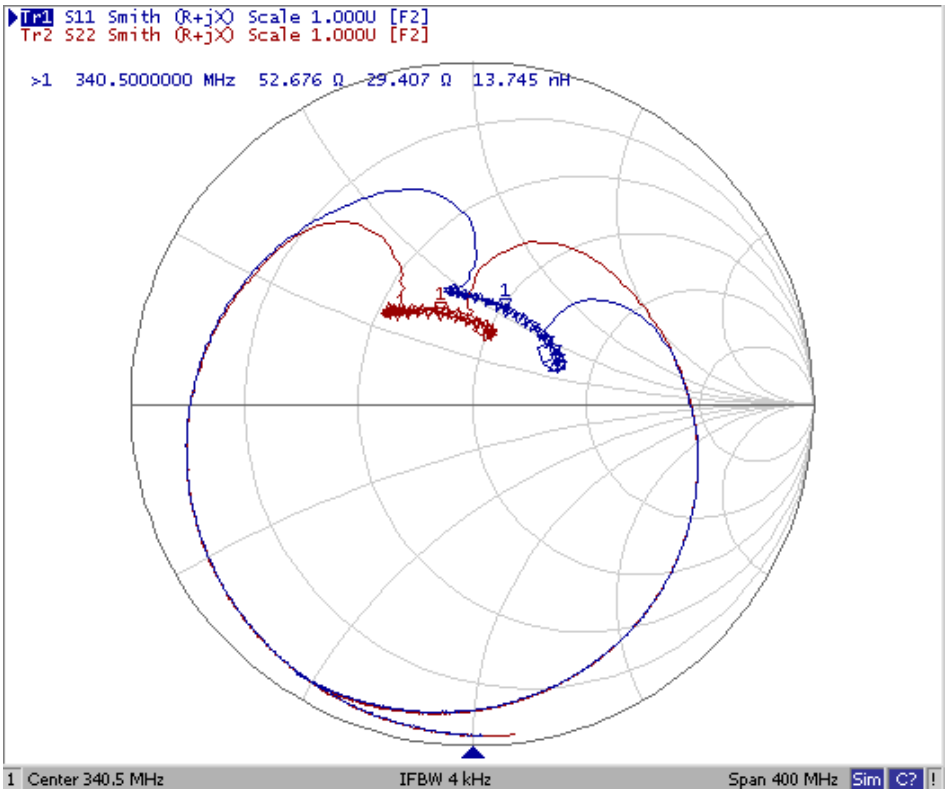
3. Smith Chart:



4. Wide Band:

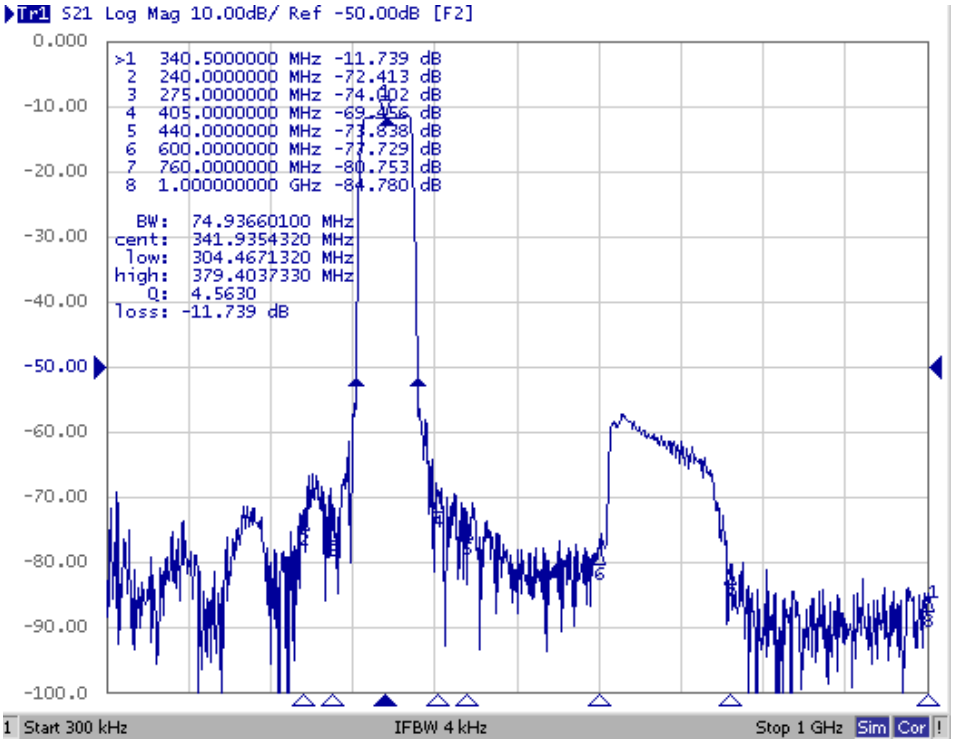


Fig. 4. Horizontal: 100MHz / Div, Vertical: 10dB / Div

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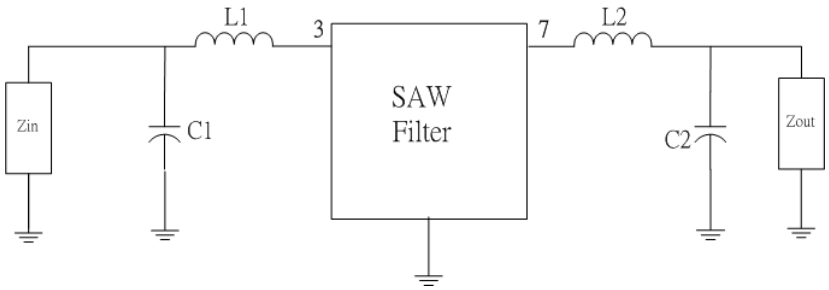
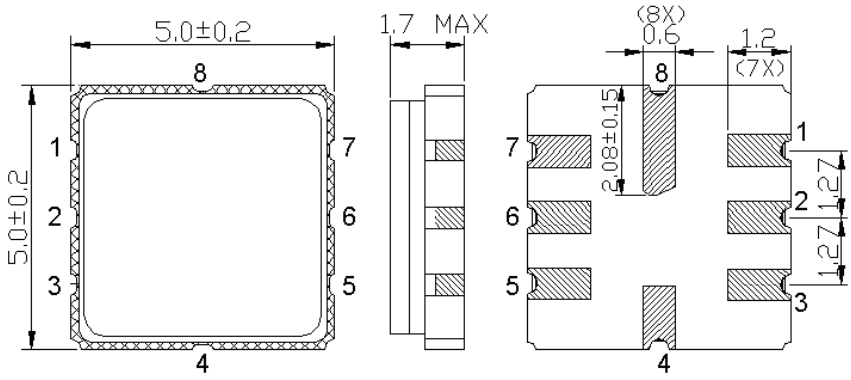
D. MATCHING CIRCUIT:



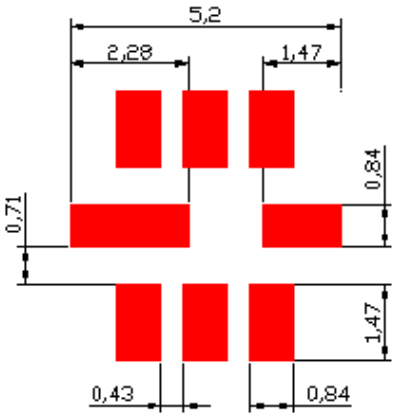
L1 = 33nH, L2 = 33nH, C1 = 8pF, C2 = 8pF

E. OUTLINE DRAWING:



3: Input
2: Input ground
7: Output
6: Output ground
1, 4, 5, 8: Ground
Unit: mm

F. PCB FOOTPRINT:



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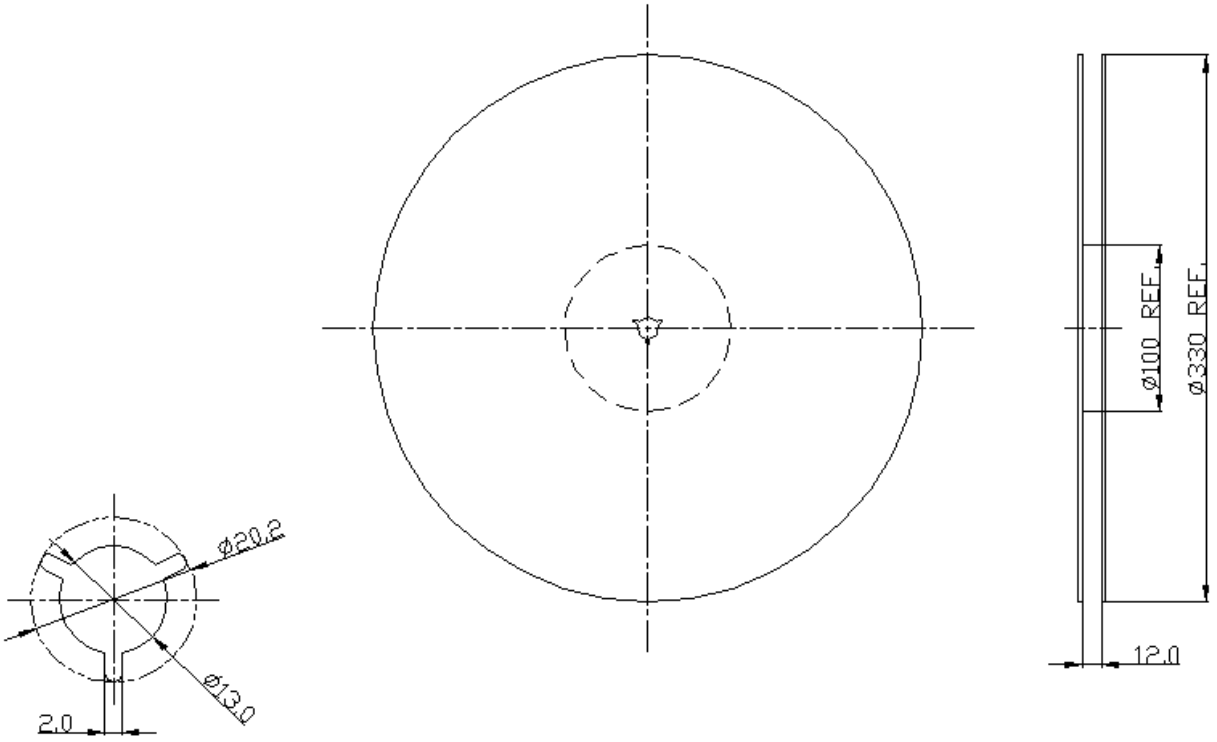
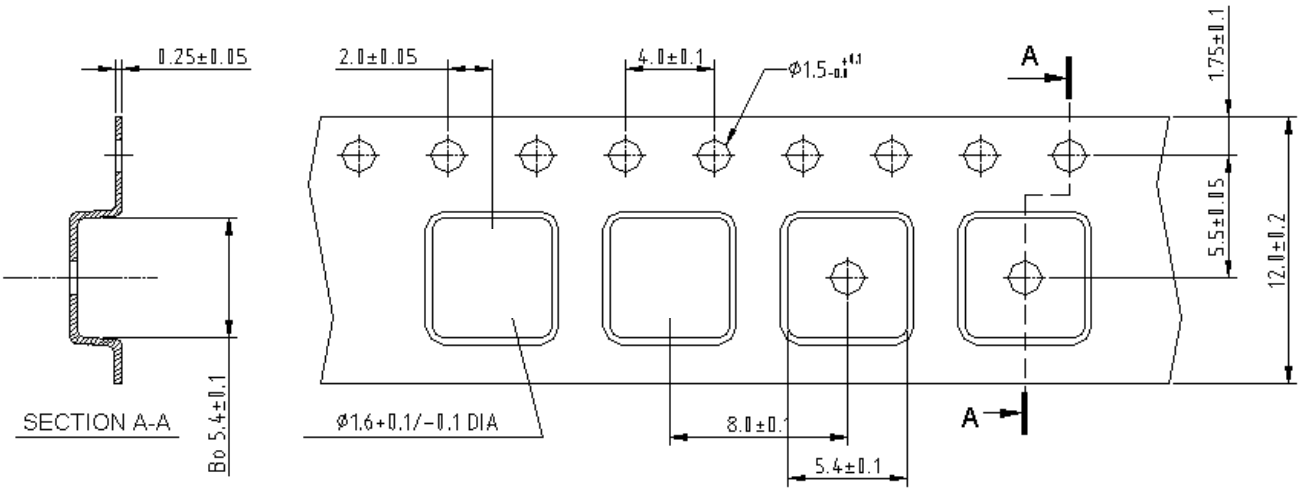
G. PACKING:

1. Reel Dimensions



2. Tape Dimensions



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H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 260°C +0/-5°C peak (20 ~ 40 sec).
4. Time: 2 times.