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

SAW Filter 150.0MHz — Model: TB1004A
Part No: MP04686 — Rev No: 2

A. MAXIMUM RATING:

Electrostatic **S**ensitive **D**evice (**ESD**)

1. Operating Temperature: -40°C ~ +85°C
2. Storage Temperature: -40°C ~ +85°C
3. Input power: 10dBm
4. Moisture Sensitive Level: Level 1 (MSL1)

B. CHARACTERISTICS:

Ambient Temperature: 25°C

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency Fc MHz	-	150.0	-	-
Minimum Insertion loss IL dB	-	15.5	18	-
1dB BW MHz	50	52.5	-	-
Return Loss		3.7		
VSWR		4.7		
Phase linearity deg		4.2	6	
Rejection at Fc ± 35MHz	40	44		
Rejection at Fc ± 75MHz	45	52		
Rejection at Fc ± 100MHz	45	53		
Rejection from DC ~ 50MHz	50	53		
Rejection from 250 ~ 590MHz	35	38		
Substrate Material	YZ-LiNbO3			-
Temp Coefficient ppm/K	-	-94	-	-
Matching: 1.The input of the filter will be matched to 50 ohm 2.The output of the filter will be matched to 50 ohm				

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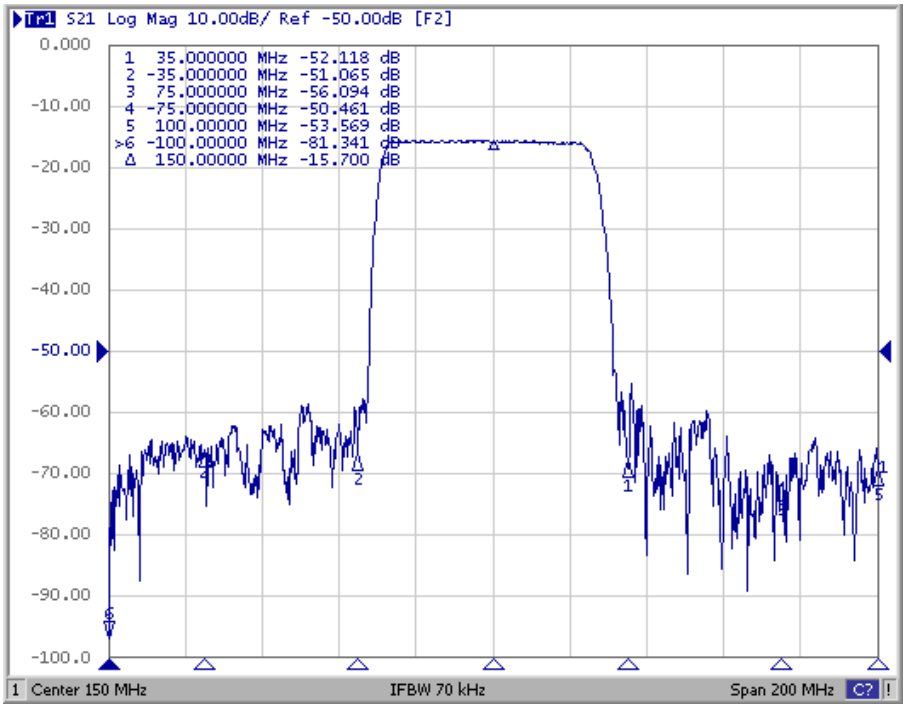
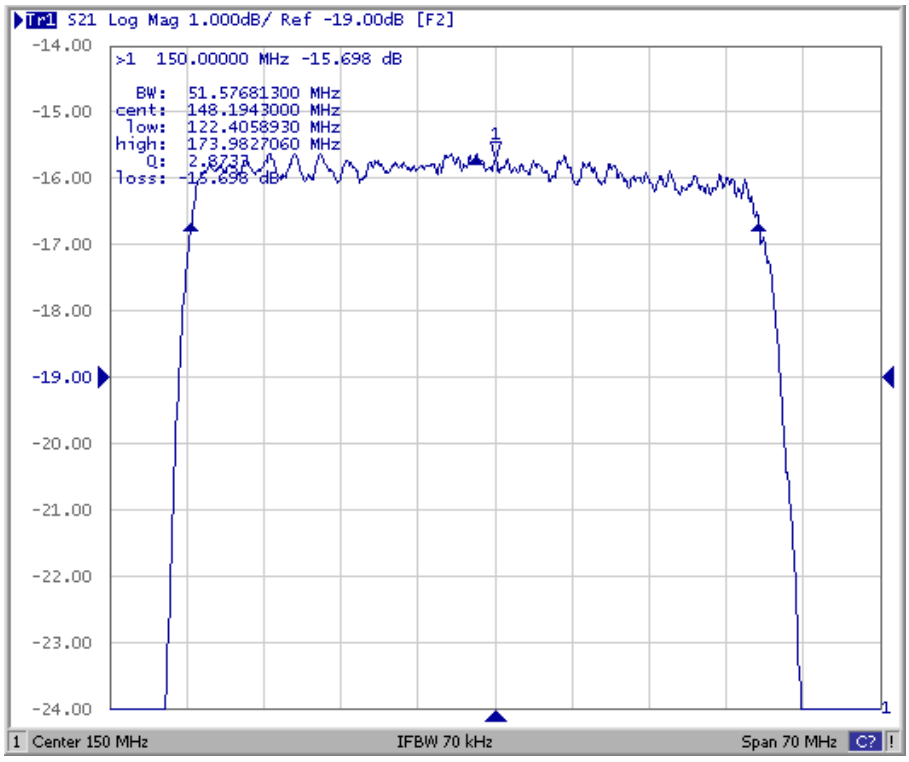
C. FREQUENCY CHARACTERISTICS:

1. S21 Response: (span: 200MHz)



2. Pass-band Response: (span: 70MHz)



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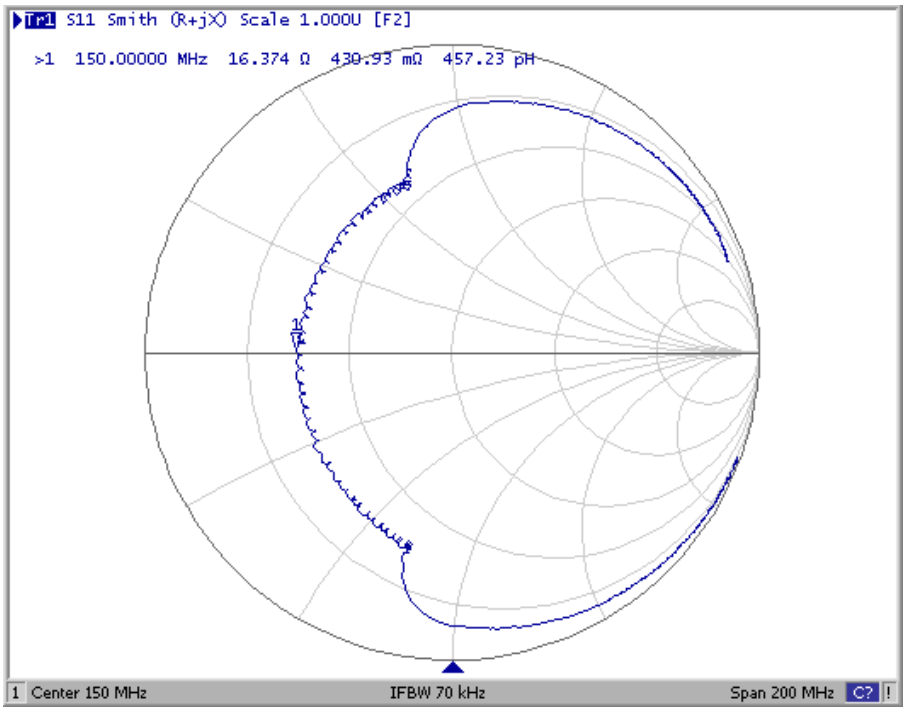
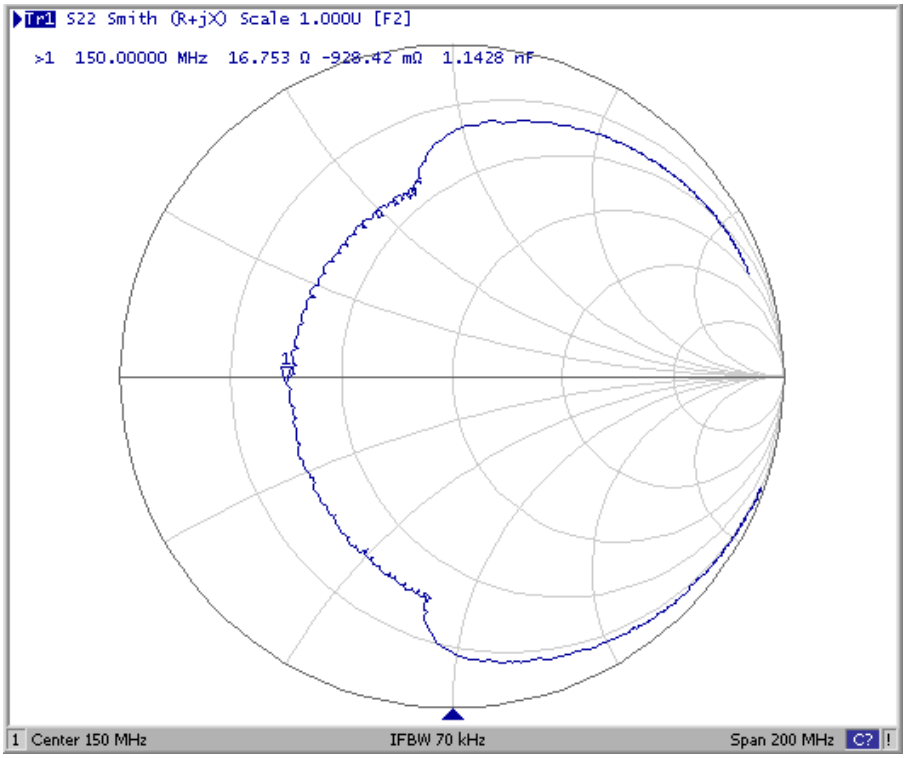
3. S11 Smith Chart: (span: 200MHz)



4. S22 Smith Chart (span: 200MHz)



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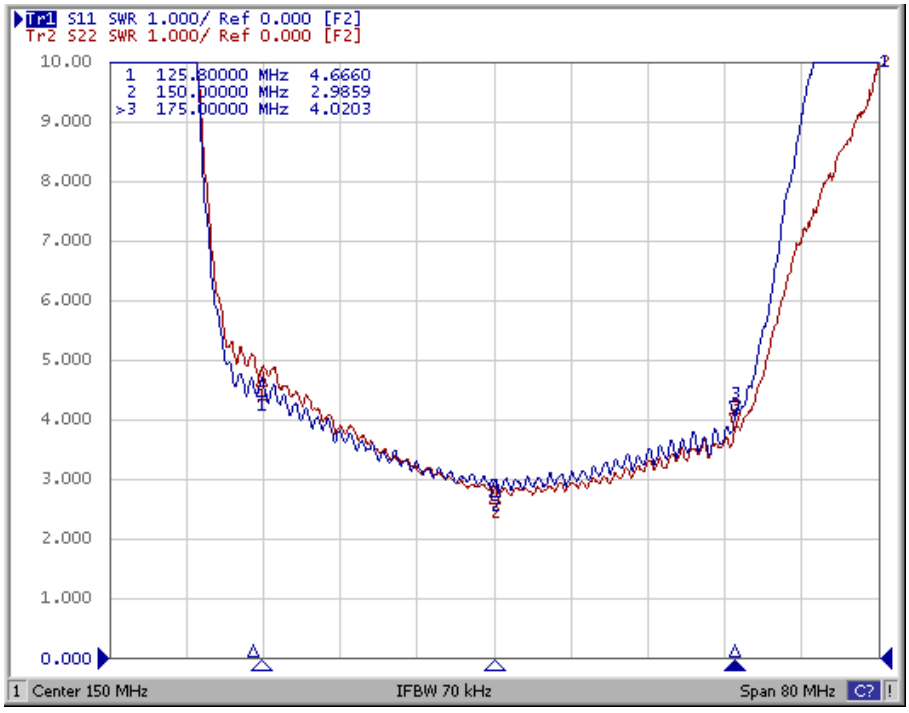
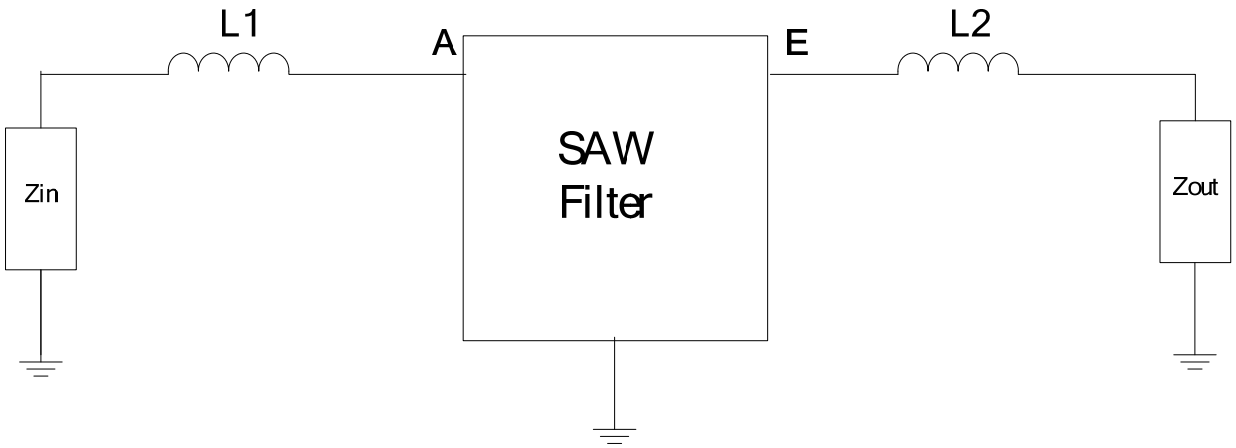
5. S11 & S22 Smith Chart (span: 80MHz)



D. MEASUREMENT CIRCUIT:

Z_{IN}= Z_{OUT}= 50ohm



L1 = 132nH; L2 = 132nH

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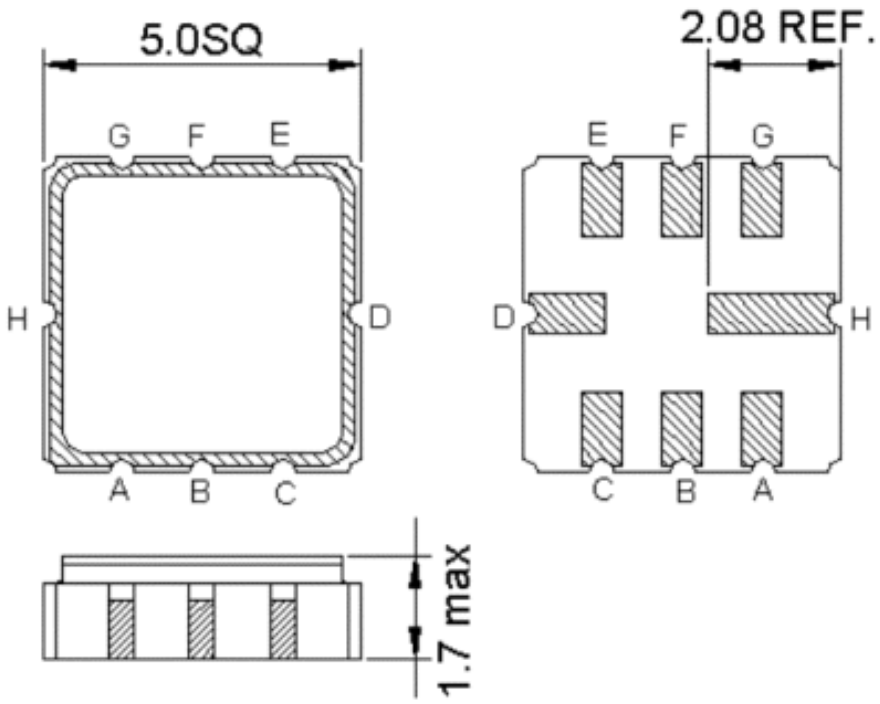
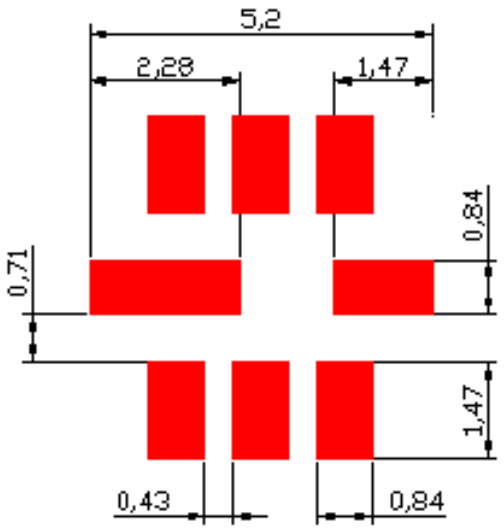
E. OUTLINE DRAWING:



A: RF input
E: RF output
H, D: Case Ground
B, C, F, G: Ground
Unit: mm

F. PCB FOOTPRINT:



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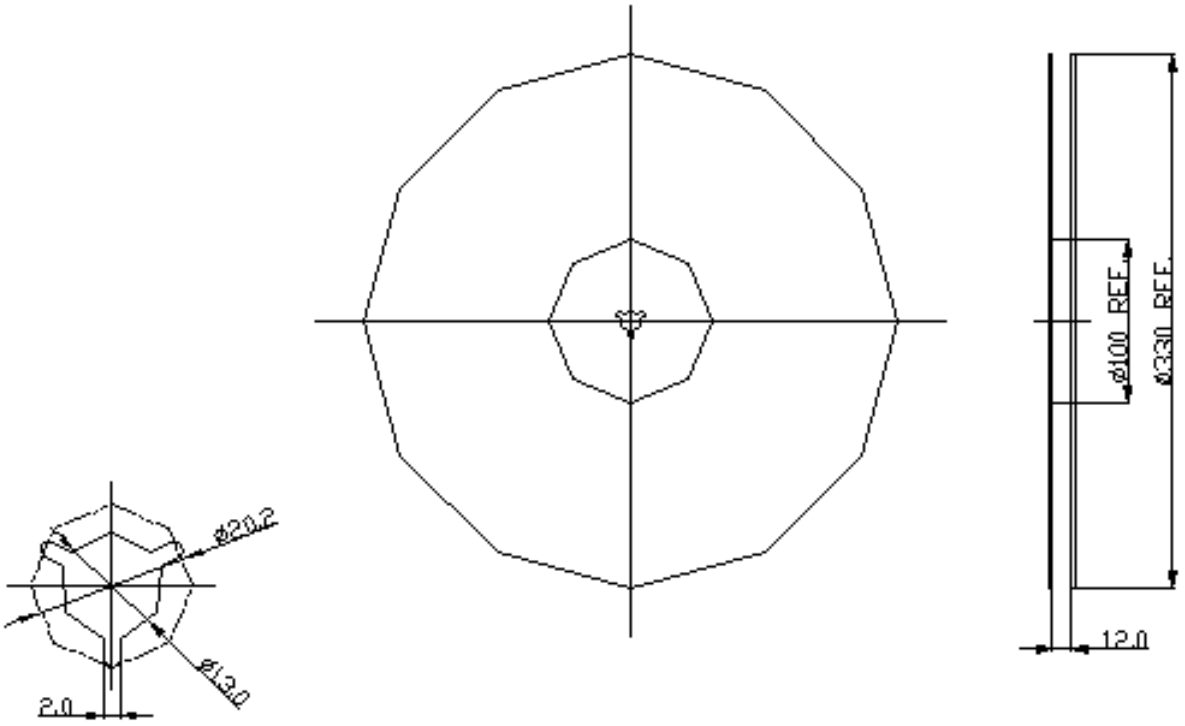
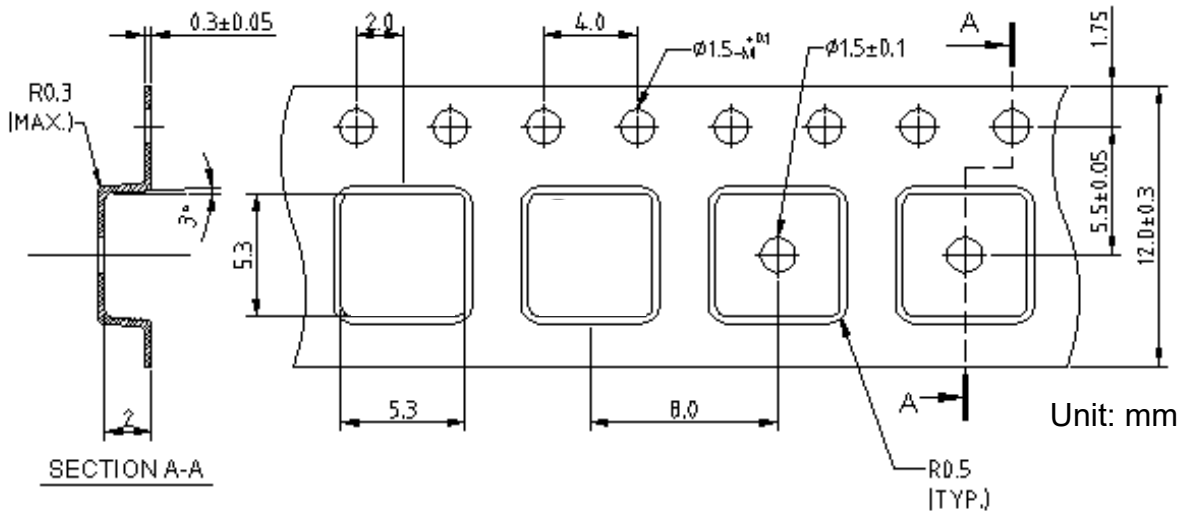
G. PACKING:

1. Reel Dimension



2. Tape Dimension



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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 secs)
4. Time: 2 times.