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

SAW Filter 172.250MHz — Model: TB1205A
Part No: MP07391 — Rev No: 1

A. MAXIMUM RATINGS:

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

1. Operating Temperature: -40°C to 85°C
2. Storage Temperature: -40°C to 85°C
3. Input Power: 15dBm
4. DC Voltage: 5V

B. ELECTRICAL CHARACTERISTICS:

Ambient Temperature: 25°C

Characteristics	Min.	Typ.	Max.
Center frequency Fc MHz	-	172.25	-
Insertion Loss at Fc dB	-	6.0	7.4
Amplitude ripple variation (Fc ±100kHz) dB	-	0.4	1.0
Group Delay variation (Fc ±90kHz) nsec	-	340	500
In/Output VSWR (Fc ±90kHz)	-	2.6	-
Relative Attenuation dB			
Fc ±400kHz ~ Fc ±600kHz	15	21	-
Fc ±600kHz ~ Fc ±800kHz	30	33	-
Fc ±800kHz ~ Fc ±1.6MHz	30	35	-
Fc ±1.6kHz ~ Fc ±3.0MHz	35	38	-
Fc ±3.0MHz ~ Fc ±35.0MHz	35	38	-
10 ~ Fc-35MHz	45	60	-
Fc+35MHz ~ 2000MHz	45	60	-
Temperature Coefficient ppm/°C2		-0.036	
Source Impedance (Differential) Ω	-	200/200	-
Load Impedance (Differential) Ω	-	200/200	-

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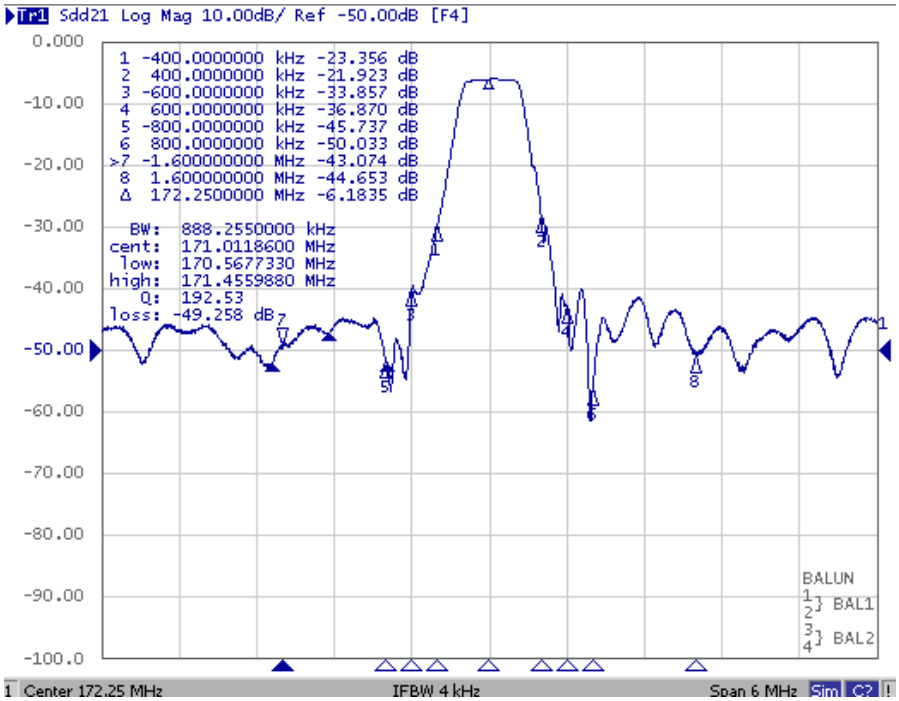
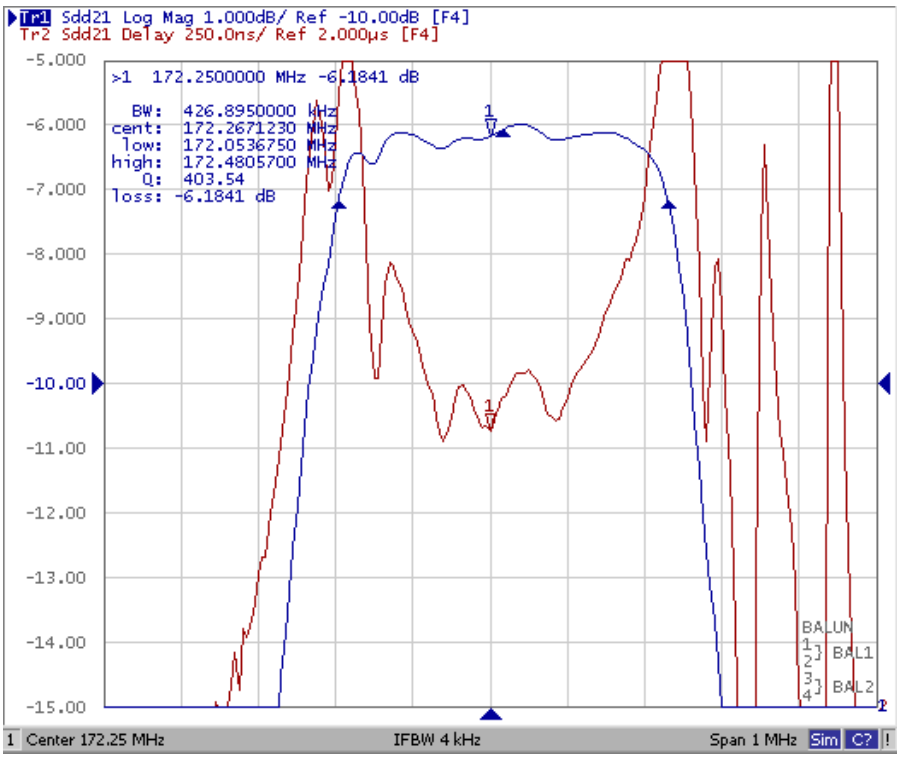
C. FREQUENCY CHARACTERISTICS:

1. Narrow band Response:



2. Pass Band Response and Group Delay Response:



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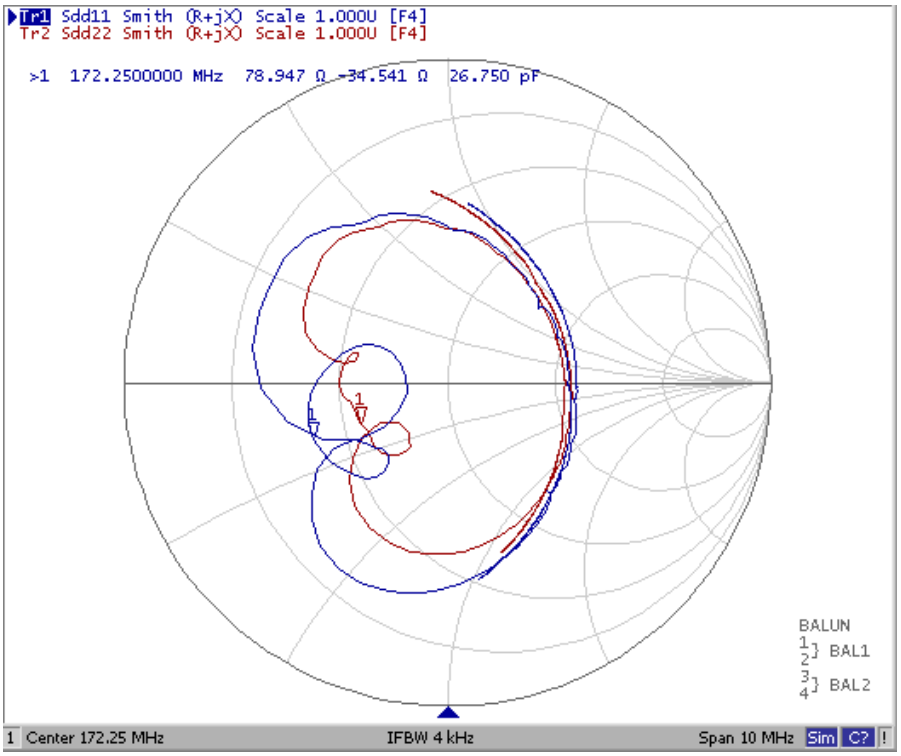
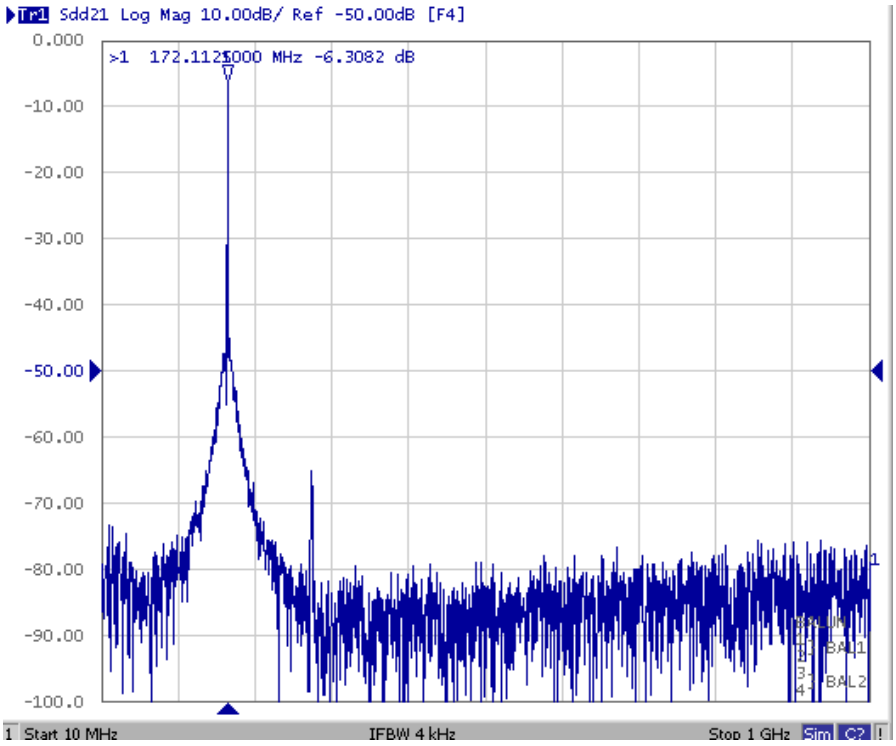
3. Smith Chart:



4. Wide Band Response:



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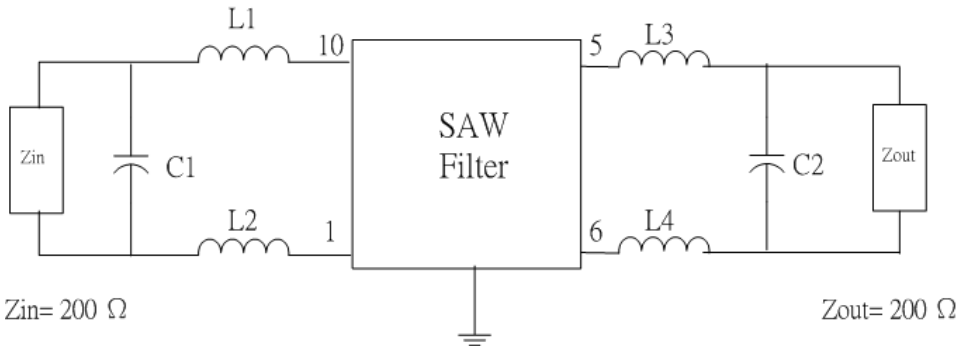
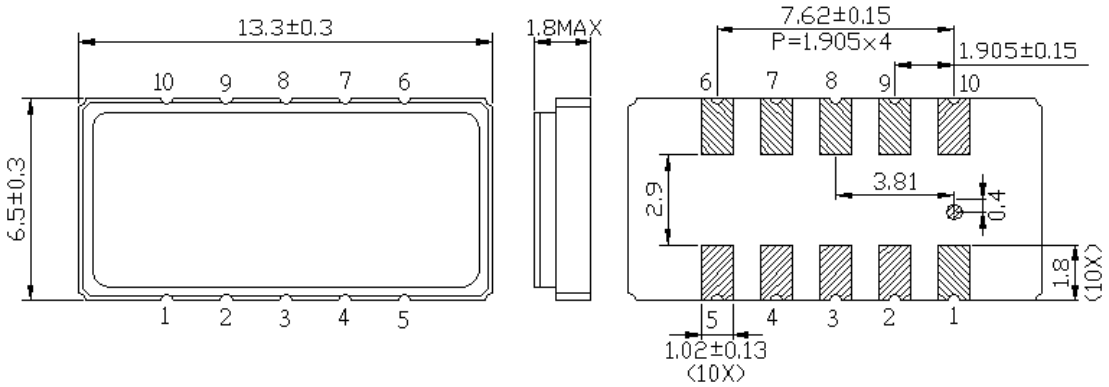
D. MATCHING CIRCUIT:



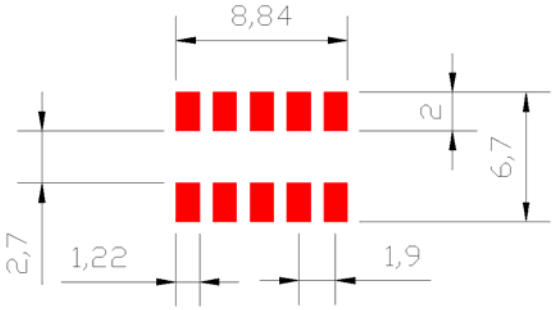
L1 = L2 = 43nH, L3 = L4 = 39nH, C1 = 20pF, C2 = 24pF

E. OUTLINE DRAWING:



10: Input
1: Balanced Input or Ground
5: Output
6: Balanced Output or Ground
2, 3, 4, 7, 8, 9: Ground
Unit: mm

F. PCB FOOTPRINT:



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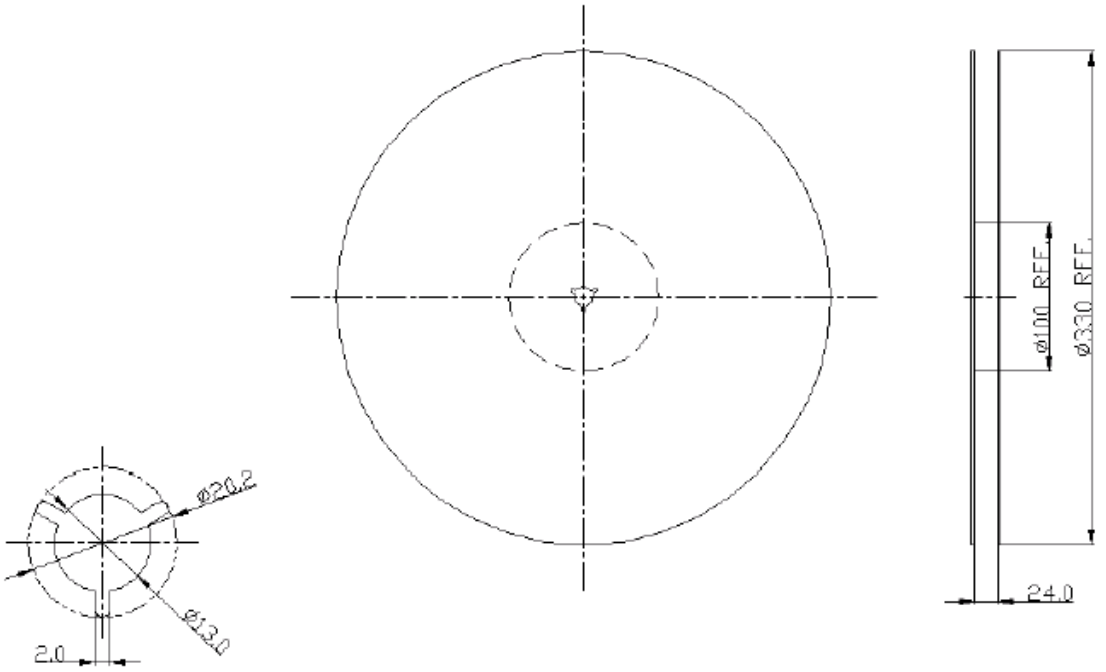
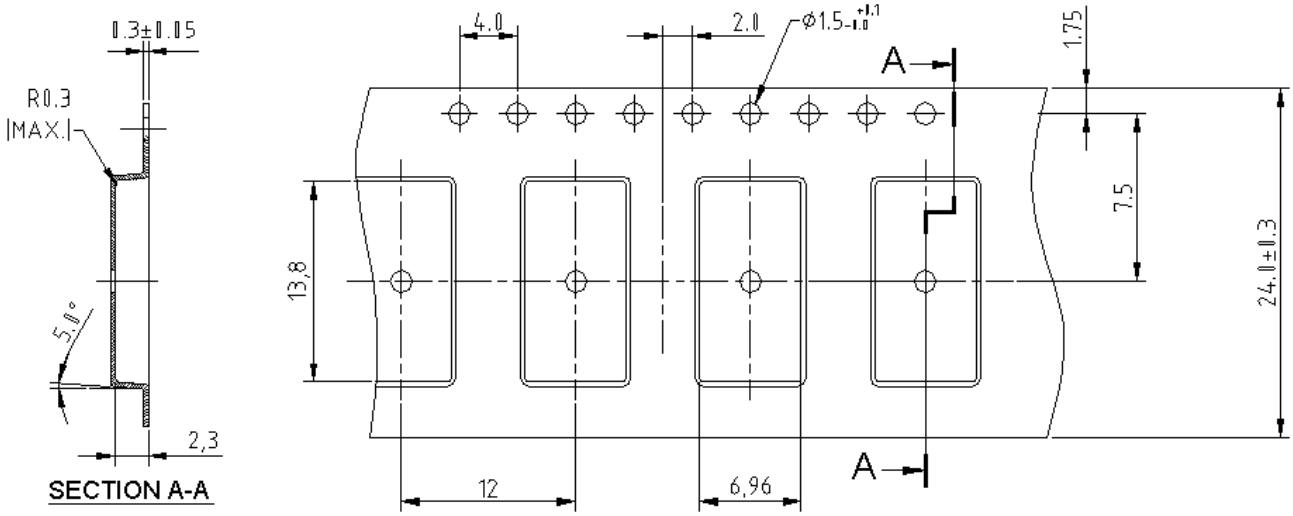
G. PACKING:

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



2. Tape Dimension



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H. RECOMMENDED REFLOW PROFILE:

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 ~ 40sec).
4. Time: 2 times.