

SAW Filter 433.920MHz

Model: TA1884A

Part No: MP06987

Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm
2. DC Voltage: 6V
3. Operating Temperature: -40°C to +95°C
4. Storage Temperature: -40°C to +95°C

B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	433.92	-
3dB BW	MHz	-	0.63	-
Minimum insertion loss IL (min)				
Incl. loss of matching elements(Q=) *1)	dB	-	2.7	3.4
Exclude loss in matching elements *2)	dB	-	2.5	3.2
Passband (relative to IL min) *1)				
433.76 ~ 434.08MHz	dB	-	0.5	2.0
433.74 ~ 434.10MHz	dB	-	0.7	3.0
433.70 ~ 434.14MHz	dB	-	1.2	6.0
Attenuation (relative to IL min) *1)				
10.000 ~ 414.00MHz	dB	38	43	-
414.00 ~ 423.50MHz	dB	38	43	-
423.50 ~ 431.72MHz	dB	29	34	-
431.72 ~ 432.12MHz	dB	26	36	-
432.12 ~ 433.10MHz	dB	10	24	-
434.70 ~ 434.92MHz	dB	10	17	-
434.92 ~ 442.00MHz	dB	13	21	-
442.00 ~ 500.00MHz	dB	40	44	-
500.00 ~ 700.00MHz	dB	50	54	-
700.00 ~ 805.00MHz	dB	45	55	-
805.00 ~ 1000.00MHz	dB	60	70	-
Impedance at Fc, Input *1) $Z_{IN} = R_{IN} // C_{IN} Z_S$	$\Omega // pF$	184.5 Ω // 3.6pF		
Impedance at Fc, Output *1) $Z_{OUT} = R_{OUT} // C_{OUT} Z_L$	$\Omega // pF$	184.5 Ω // 3.6pF		

*1): The matching circuit is real by actual passive components.

0805 Coilcraft CS series chip conductor is used for inductor.

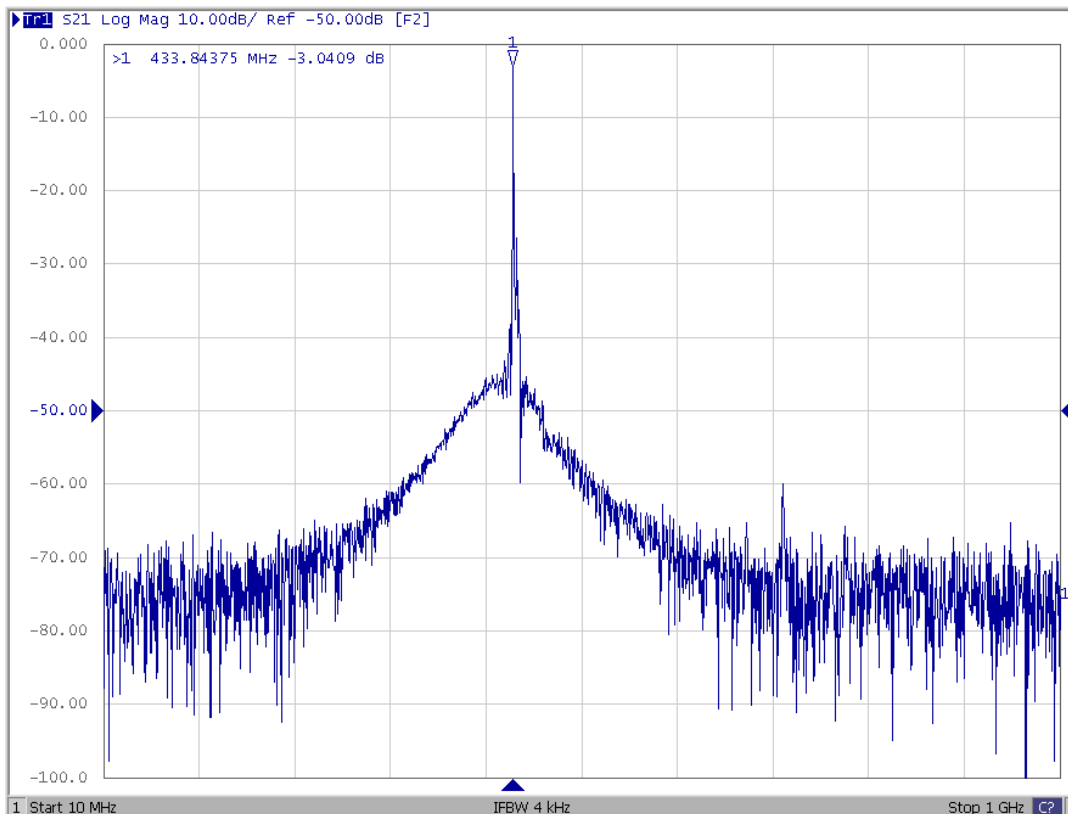
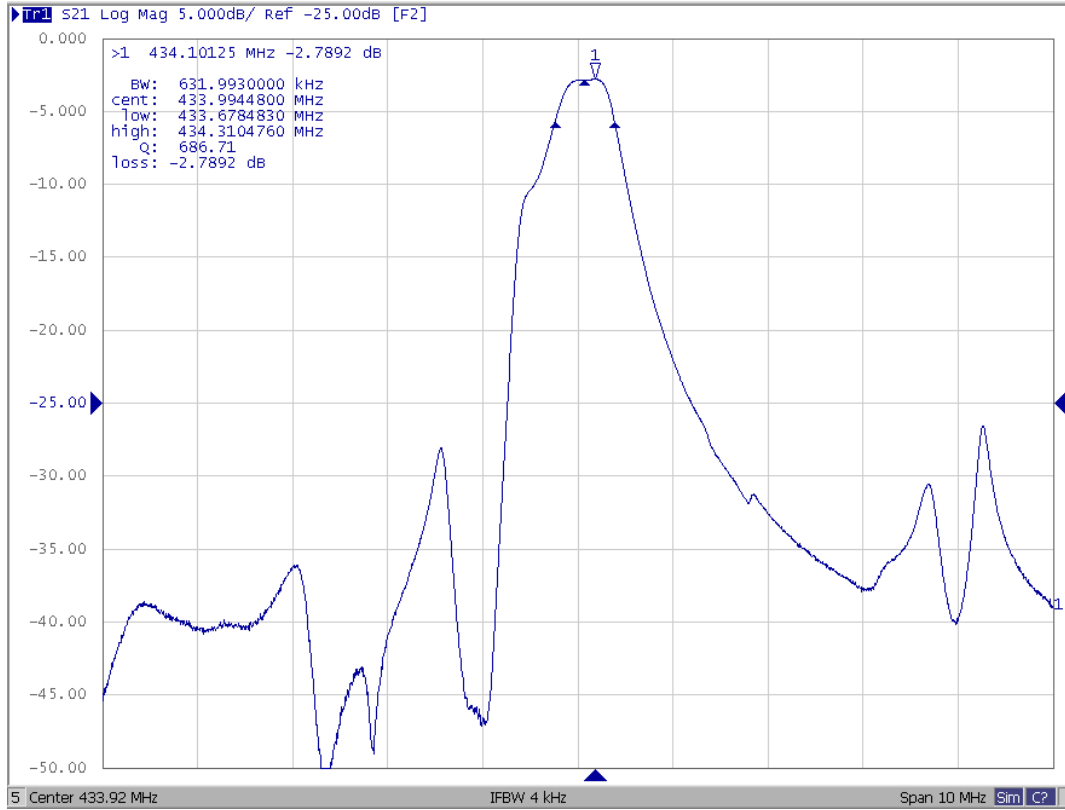
0402 muRata GRM series is used for capacitor.

*2): The matching circuit is ideal by simulation.

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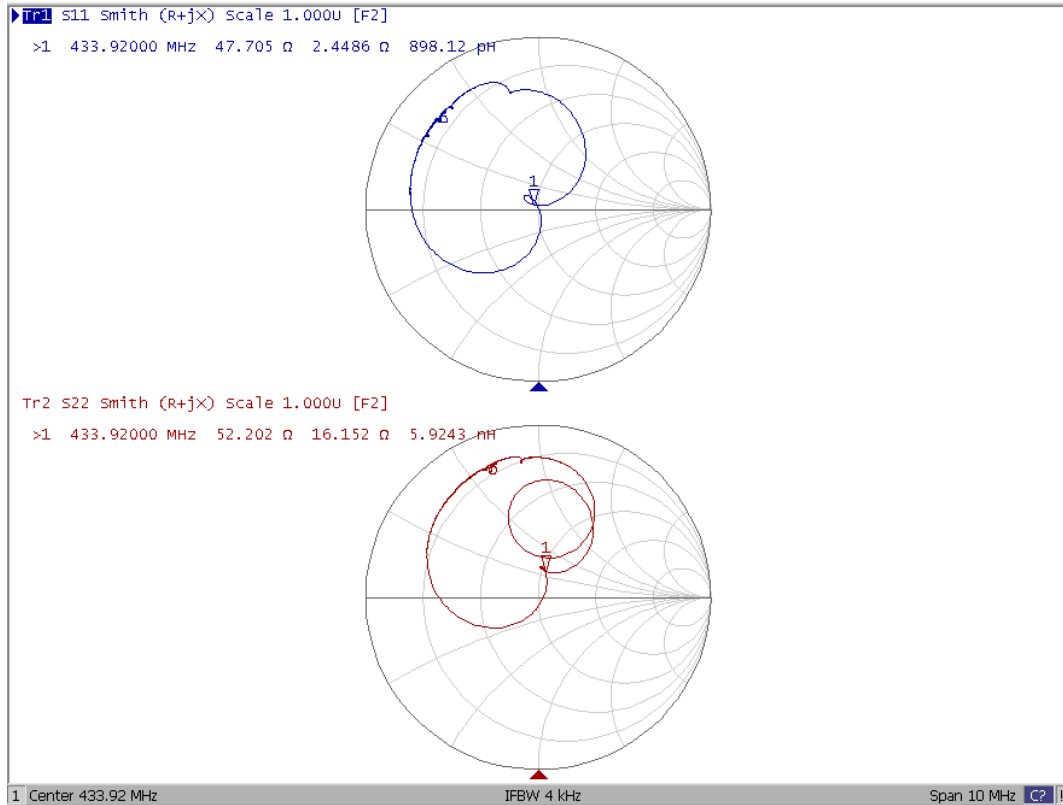
C. FREQUENCY CHARACTERISTICS:



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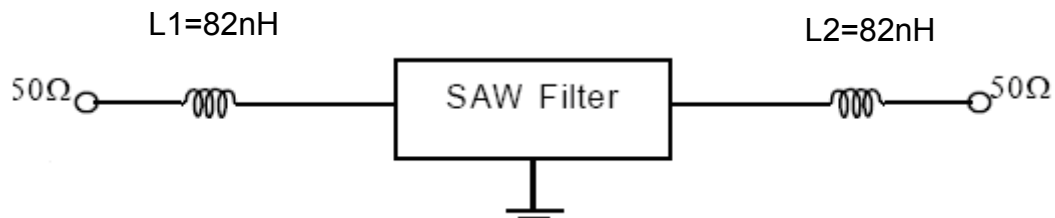
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Smith Chart



D. MEASUREMENT CIRCUIT:

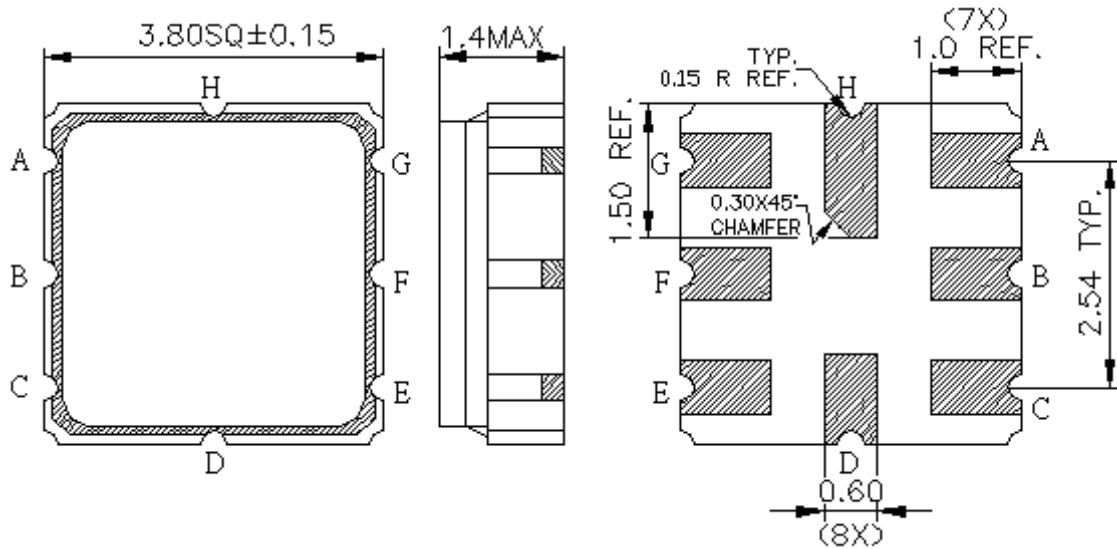
The matching circuit is real by actual passive components.



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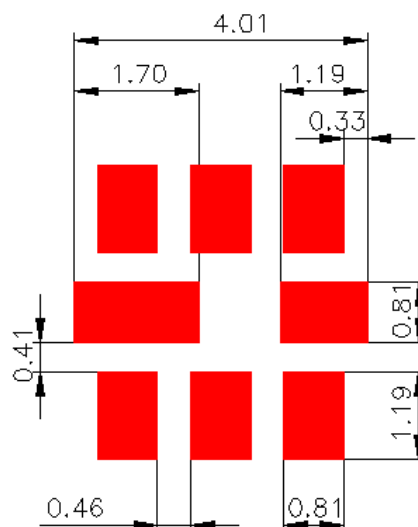
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E. OUTLINE DRAWING:



A: Input Ground or Input
B: Input or Input Ground
E: Output Ground or Output
F: Output or Output Ground
C, D, G, H: Ground
Unit: mm

F. PCB FOOTPRINT:

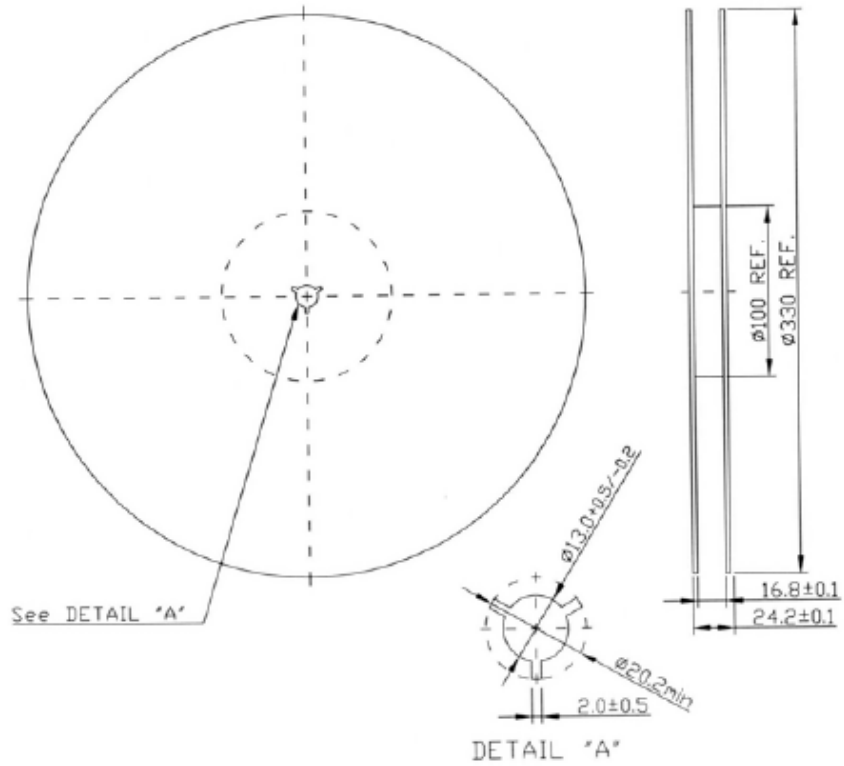


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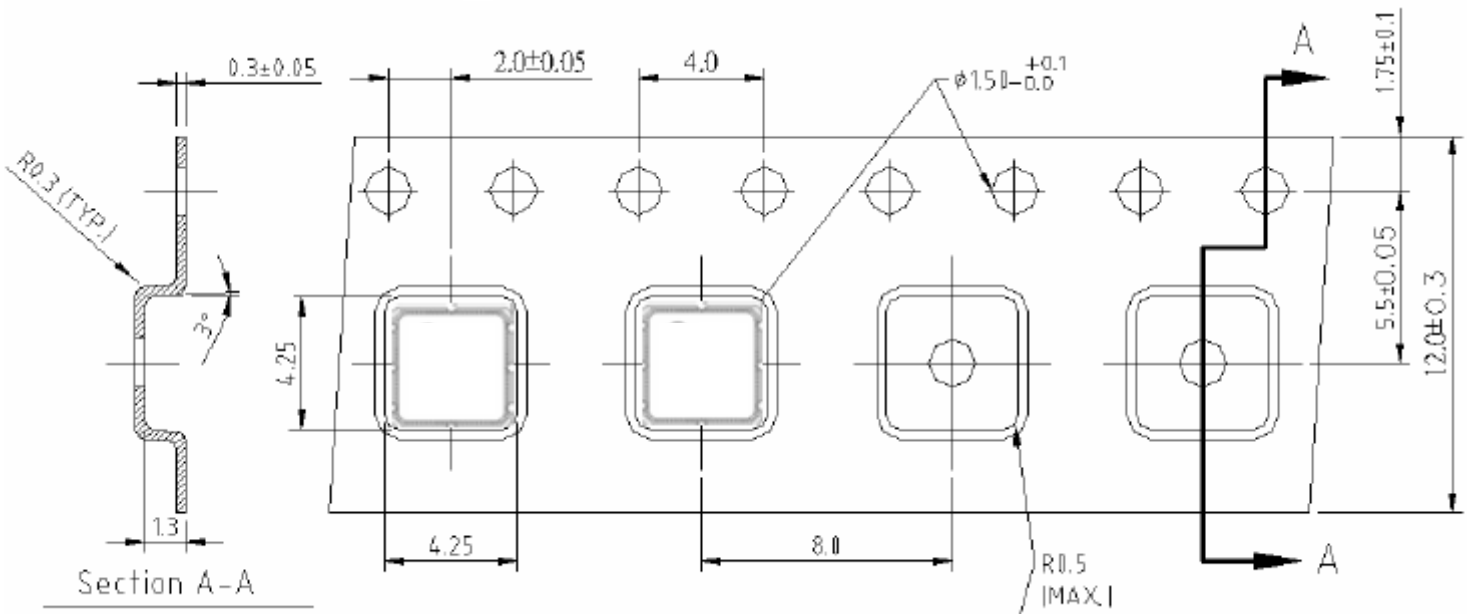
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G. PACKING:

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



2. Tape Dimension



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H. RECOMMENDED REFLOW PROFILE:

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 245 ~ 260°C peak (min. 10 sec).
4. Time: 2 times.

