

SAW Filter 433.92MHz
Part No: MP07894

Model: TA1565B
Rev No: 2

A. MAXIMUM RATING:

Electrostatic Sensitive Device

1. Input Power Level: 10dBm
2. DC Voltage: 6V
3. Operating Temperature: -40°C to +125°C
4. Storage Temperature: -40°C to +125°C
5. Moisture Sensitivity Level: Level 1 (MSL1)

B. ELECTRICAL CHARACTERISTICS:

Spec. Temperature: -40°C to +95°C

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	433.92	-
1.5dB BW	kHz	300	550	-
3dB BW	kHz	-	670	900
Minimum insertion loss IL (min)				
Incl. loss of matching elements (Q=) *1)	dB	-	2.6	3.4
Exclude loss in matching elements *2)	dB	-	2.4	3.2
Passband (relative to IL min) *1)				
433.770 ~ 434.070MHz	dB	-	0.5	3.0
Attenuation (relative to IL min) *1)				
10.000 ~ 420.00MHz	dB	47	55	-
420.00 ~ 427.00MHz	dB	43	50	-
427.00 ~ 432.00MHz	dB	27	33	-
432.00 ~ 433.00MHz	dB	17	24	-
435.00 ~ 436.00MHz	dB	15	21	-
436.00 ~ 445.00MHz	dB	21	27	-
445.00 ~ 450.00MHz	dB	44	51	-
450.00 ~ 2000.0MHz	dB	42	49	-

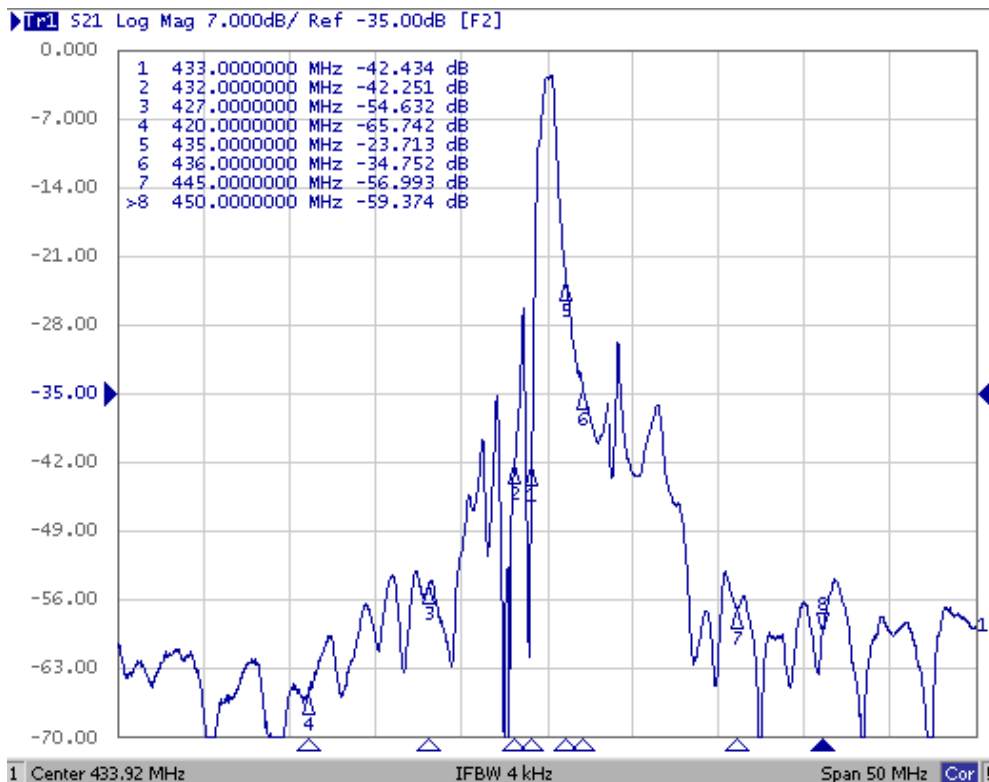
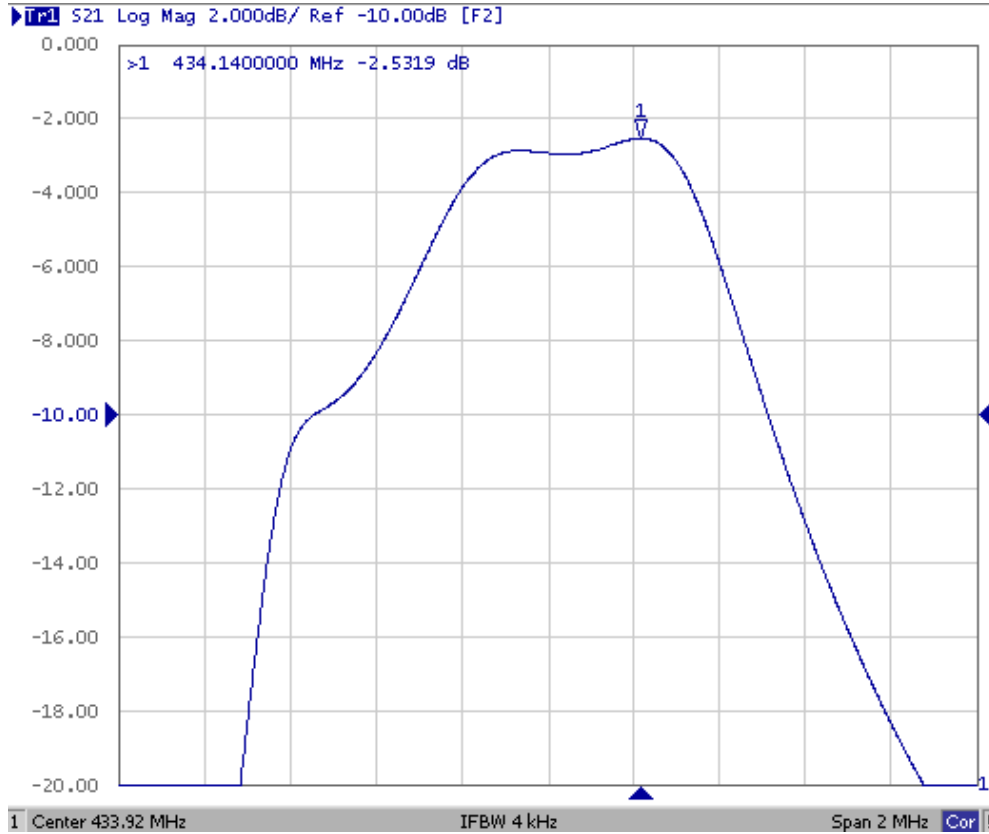
Notes:

- *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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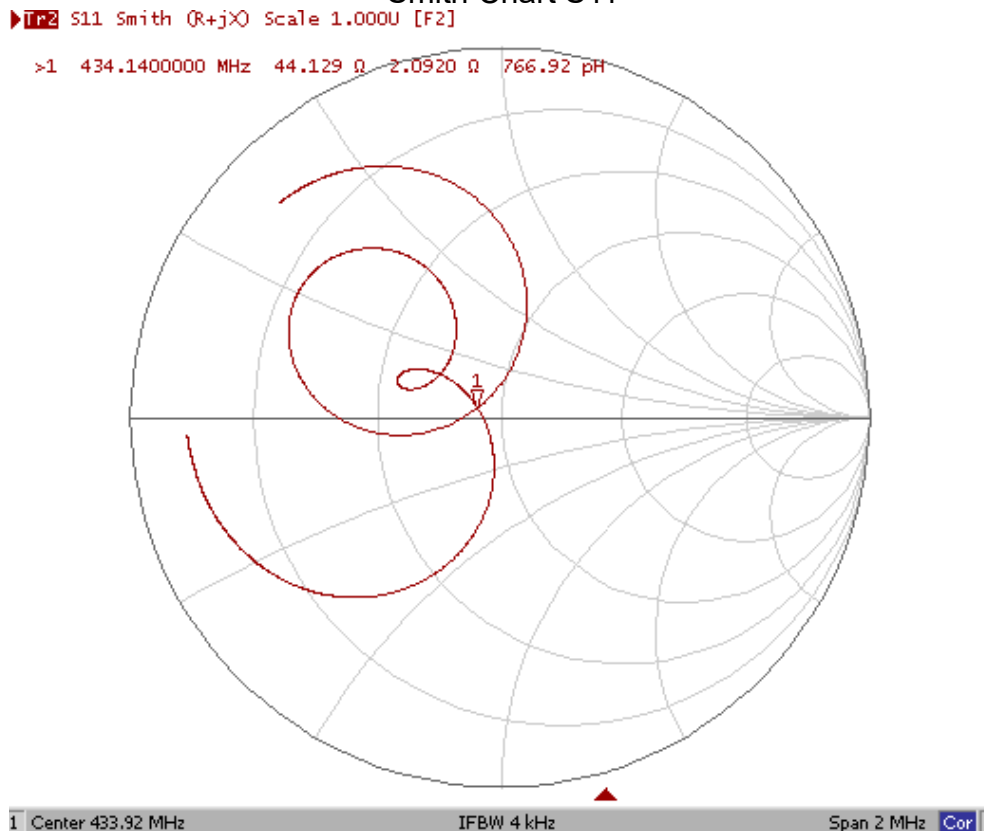
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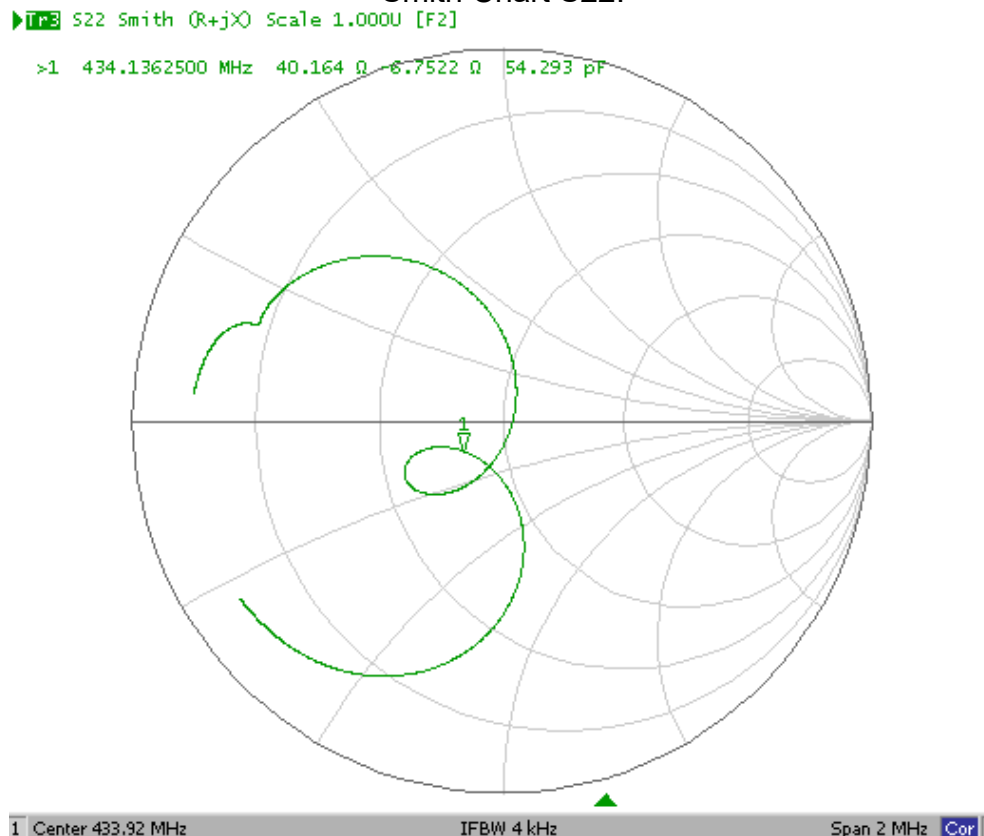
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Smith Chart S11



Smith Chart S22:

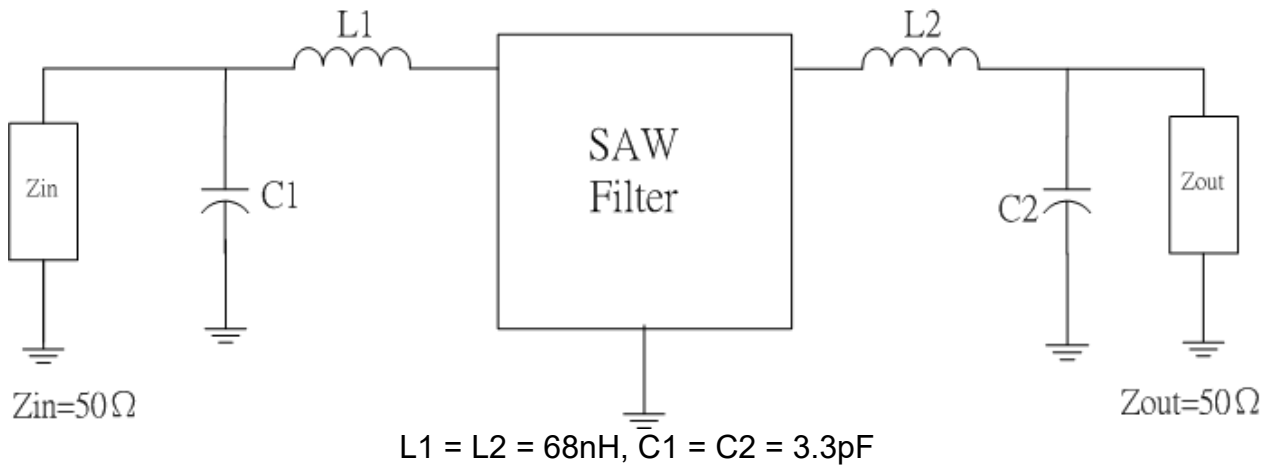


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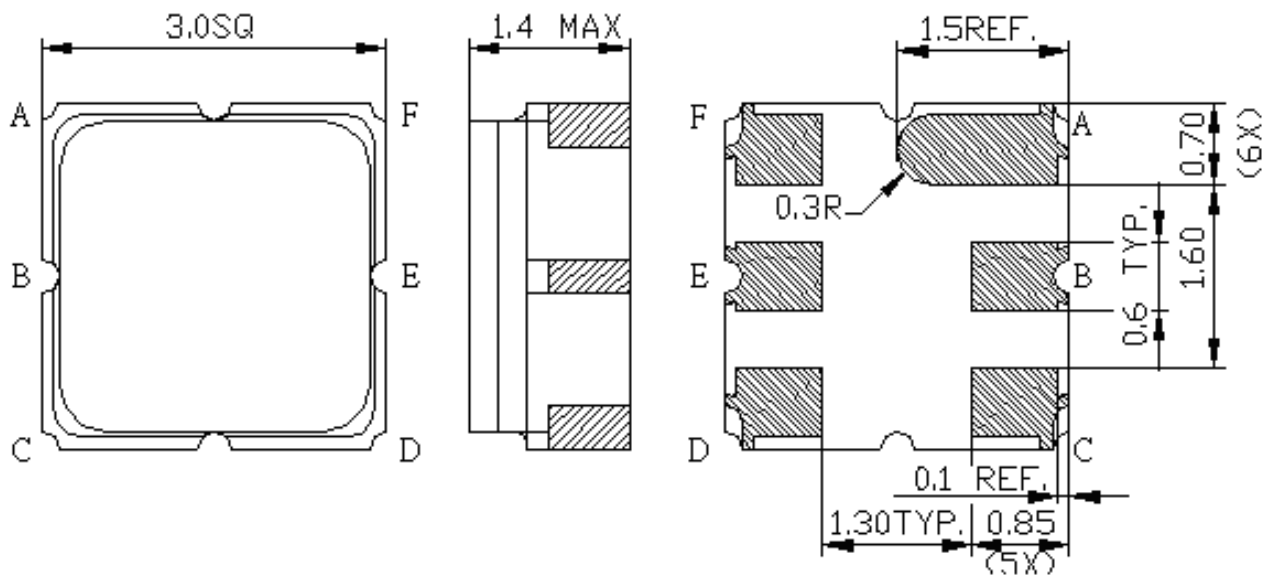
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D. MEASUREMENT CIRCUIT:

These values are for our evaluation board. Expect to need to adjust them for your PCB layout.



E. OUTLINE DRAWING:



- A: Input (recommended) or Input ground
 - B: Input ground (recommended) or Input
 - D: Output (recommended) or Output ground
 - E: Output ground (recommended) or Output
 - C, F: Ground
- Unit: mm

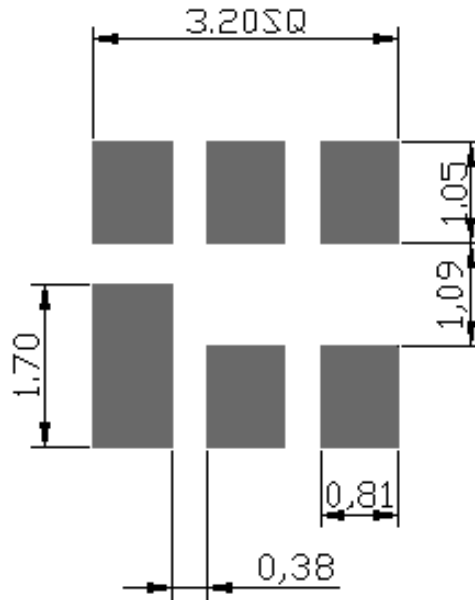
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F. PCB FOOTPRINT:

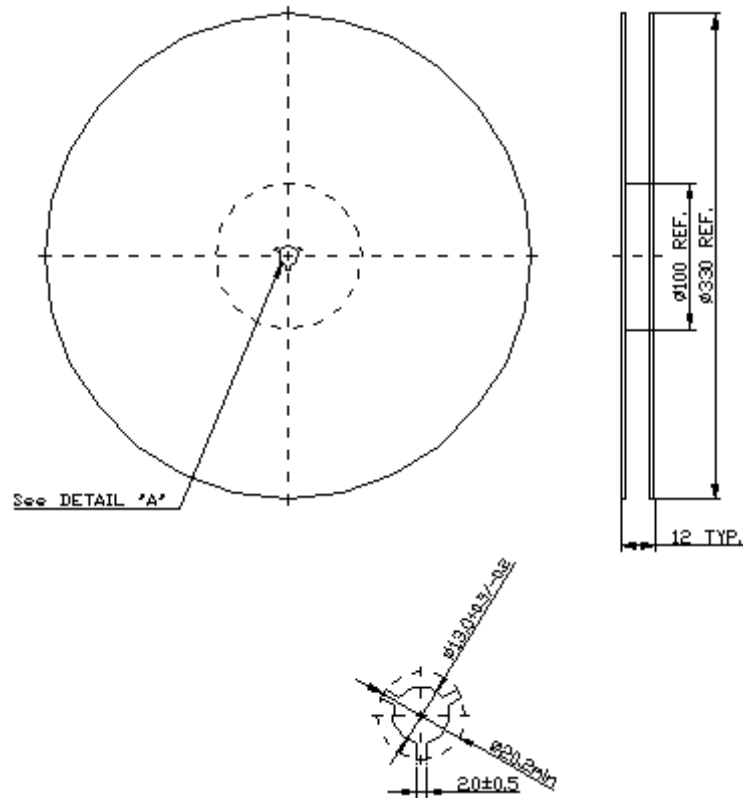


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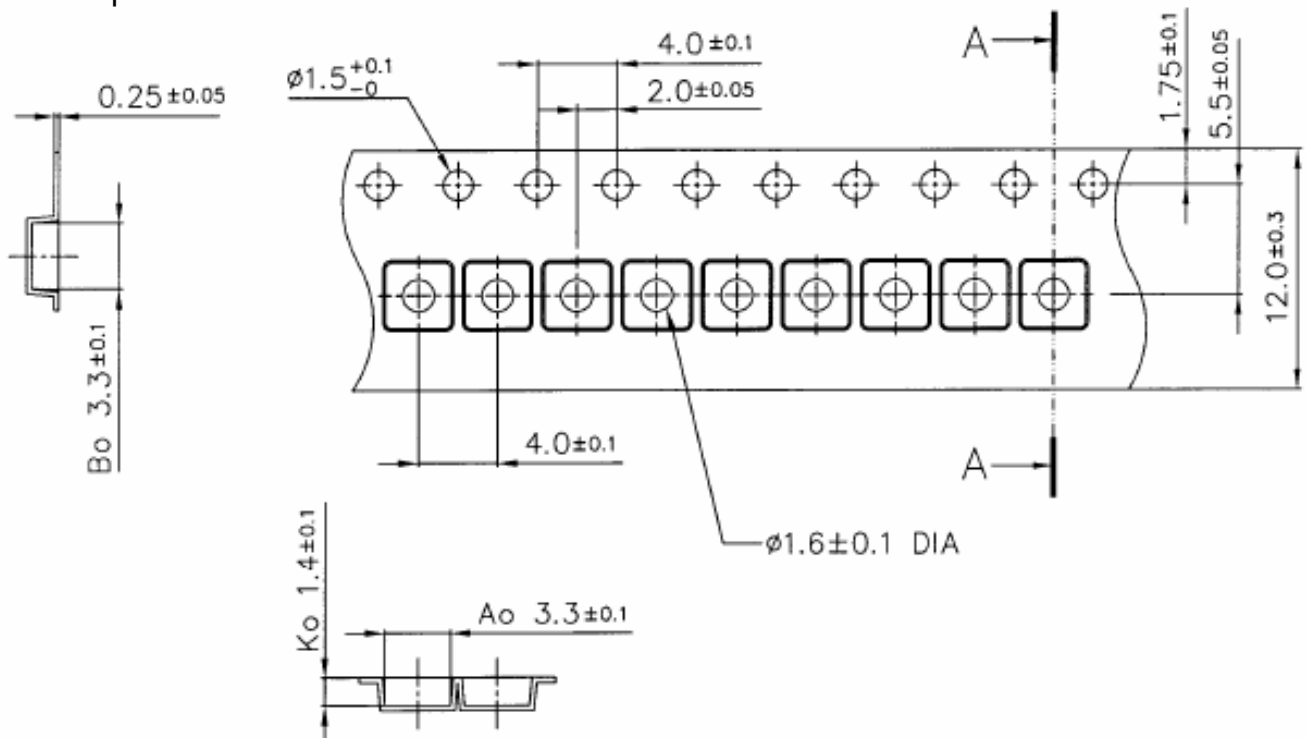
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G. PACKING:

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.

