

SAW Filter 434.170MHz

Model: TA2129A

Part No: MP09159

Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device

1. Input Power Level: 10dBm
2. DC Voltage: 0V
3. Operating Temperature: -45°C to +125°C
4. Storage Temperature: -45°C to +125°C

B. ELECTRICAL CHARACTERISTICS:

Ambient Temperature: 25°C

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	434.17	-
3dB BW	MHz	-	1.0	-
Min. insertion loss IL inc. loss of matching elements *1)	dB	-	2.6	3.50
Passband (relative to IL min) *1)				
433.80 ~ 434.54MHz	dB	-	1.9	2.5
433.76 ~ 434.54MHz	dB	-	2.4	3.5
Attenuation (relative to IL min) *1)				
10.00 ~ 360.00MHz	dB	50	54	-
360.00 ~ 415.00MHz	dB	43	46	-
415.00 ~ 425.00MHz	dB	40	43	-
425.00 ~ 431.00MHz	dB	29	33	-
431.00 ~ 432.50MHz	dB	18	26	-
432.50 ~ 433.20MHz	dB	9	22	-
435.10 ~ 435.50MHz	dB	9	11	-
435.50 ~ 437.00MHz	dB	12	15	-
437.00 ~ 445.00MHz	dB	19	21	-
445.00 ~ 460.00MHz	dB	33	37	-
460.00 ~ 550.00MHz	dB	43	46	-
550.00 ~ 1000.00MHz	dB	52	64	-
1000.00 ~ 2500.00MHz	dB	50	64	-
Input $Z_{IN} = R_{IN} // C_{IN}$	$\Omega // pF$	650 // 2.8		
Output $Z_{OUT} = R_{OUT} // C_{OUT}$	$\Omega // pF$	650 // 2.8		

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

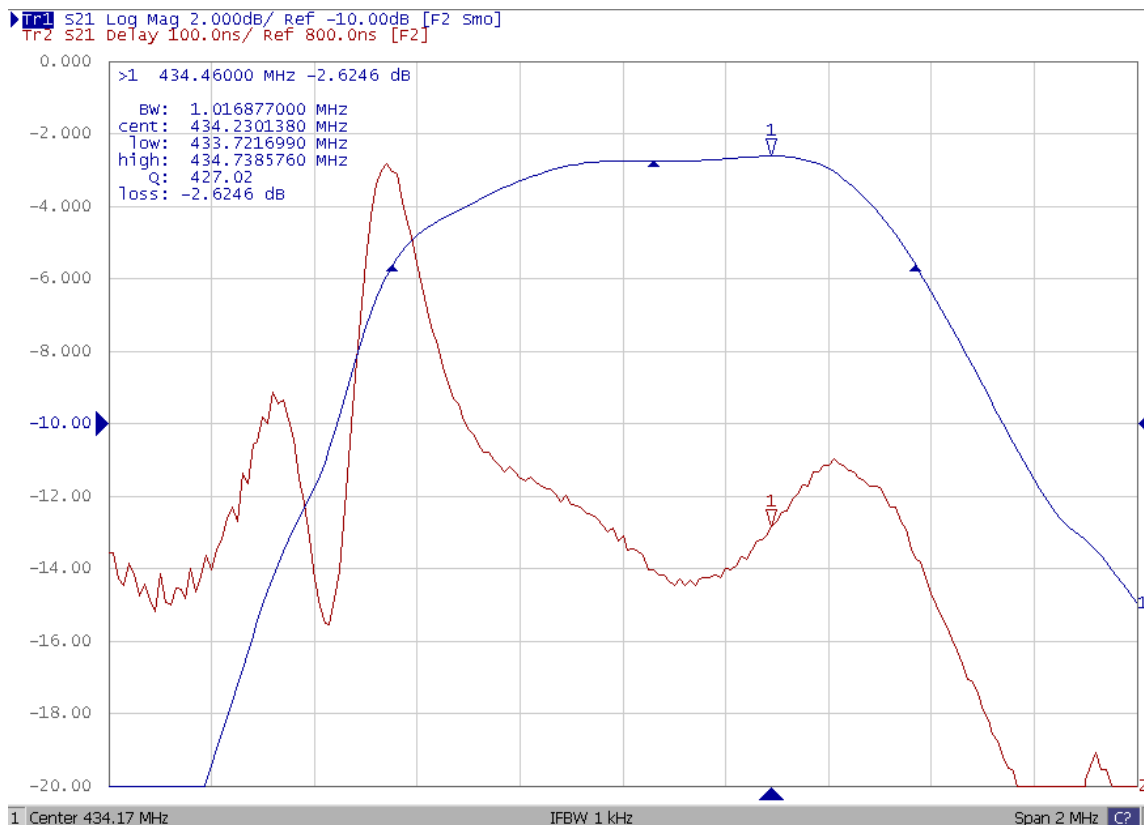
0805 Coillcraft CS series chip conductor is used for inductor.

0402 muRata GRM series is used for capacitor.

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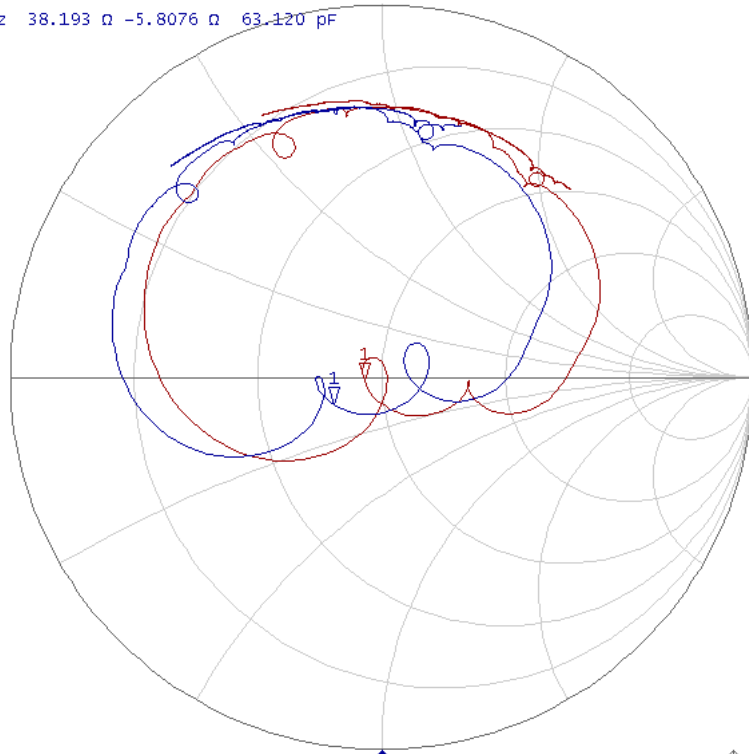
C. FREQUENCY CHARACTERISTICS:



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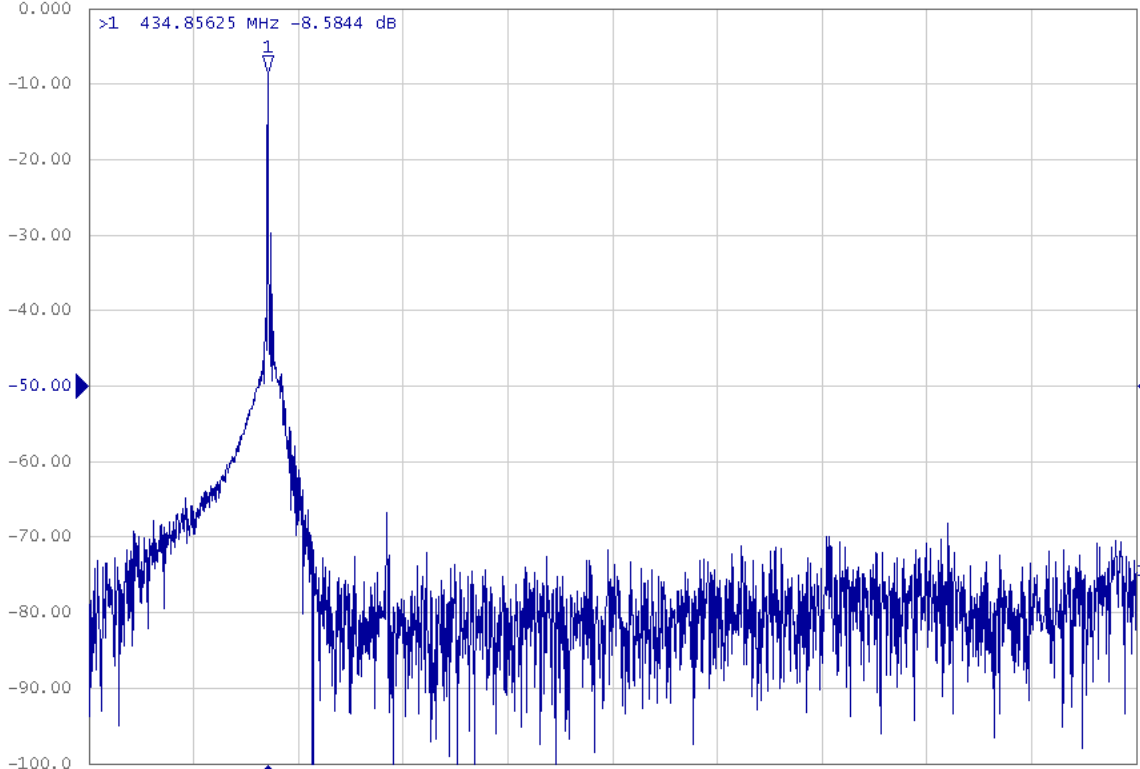
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▶ Tr1 S11 smith (R+jX) Scale 1.000U [F2 Smo]
Tr2 S22 smith (R+jX) Scale 1.000U [F2]
>1 434.17000 MHz 38.193 Ω -5.8076 Ω 63.120 pF



1 Center 434.17 MHz IFBW 1 kHz Span 20 MHz C? I

▶ Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2 Smo]

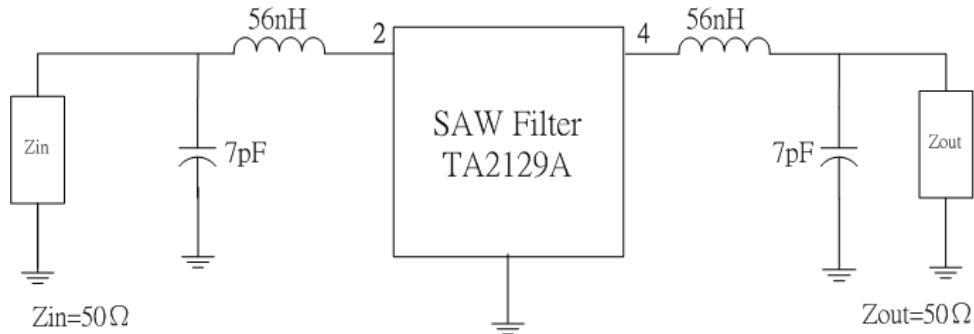


1 Start 10 MHz IFBW 1 kHz Stop 2.5 GHz C? I

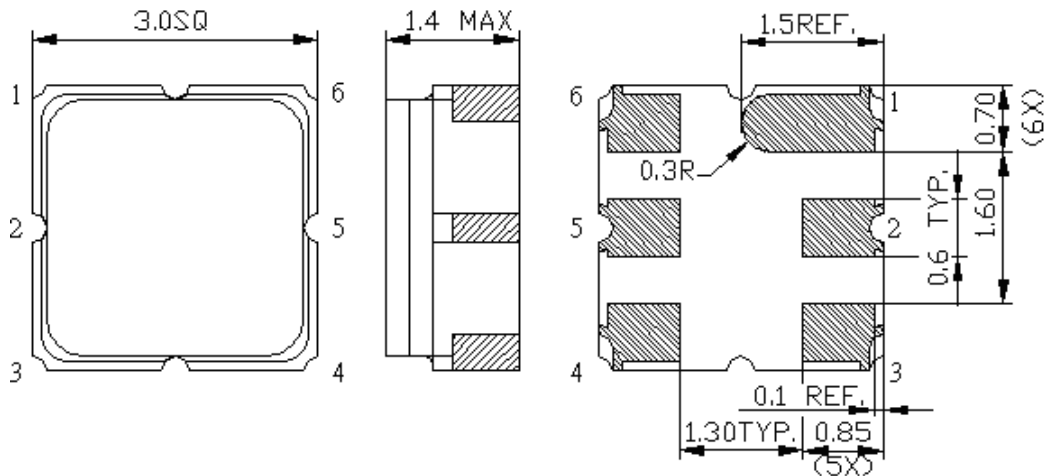
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D. MEASUREMENT CIRCUIT:

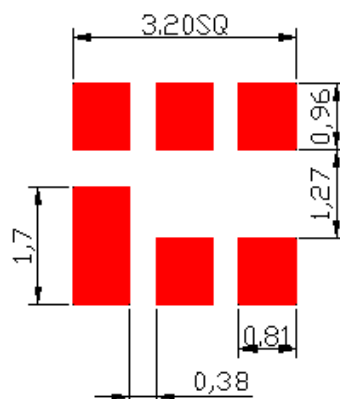


E. OUTLINE DRAWING:



- 1: Input Ground or Input
 - 2: Input or Input Ground
 - 4: Output Ground or Output
 - 5: Output or Output Ground
 - 3, 6: Ground
- Unit: mm

F. PCB FOOTPRINT:

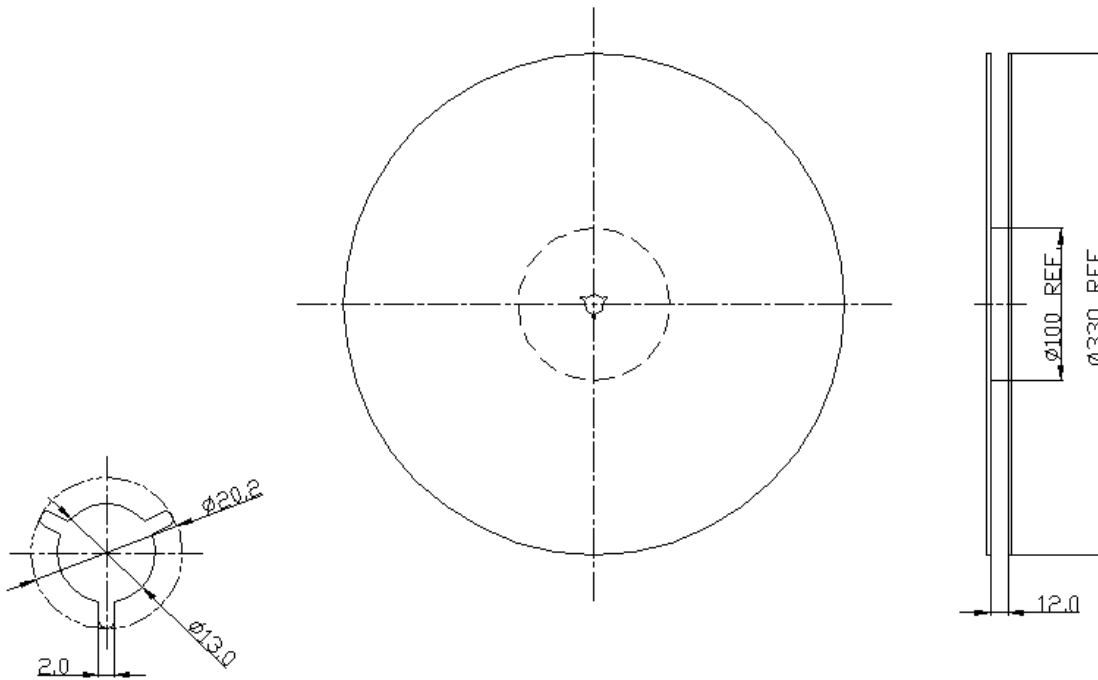


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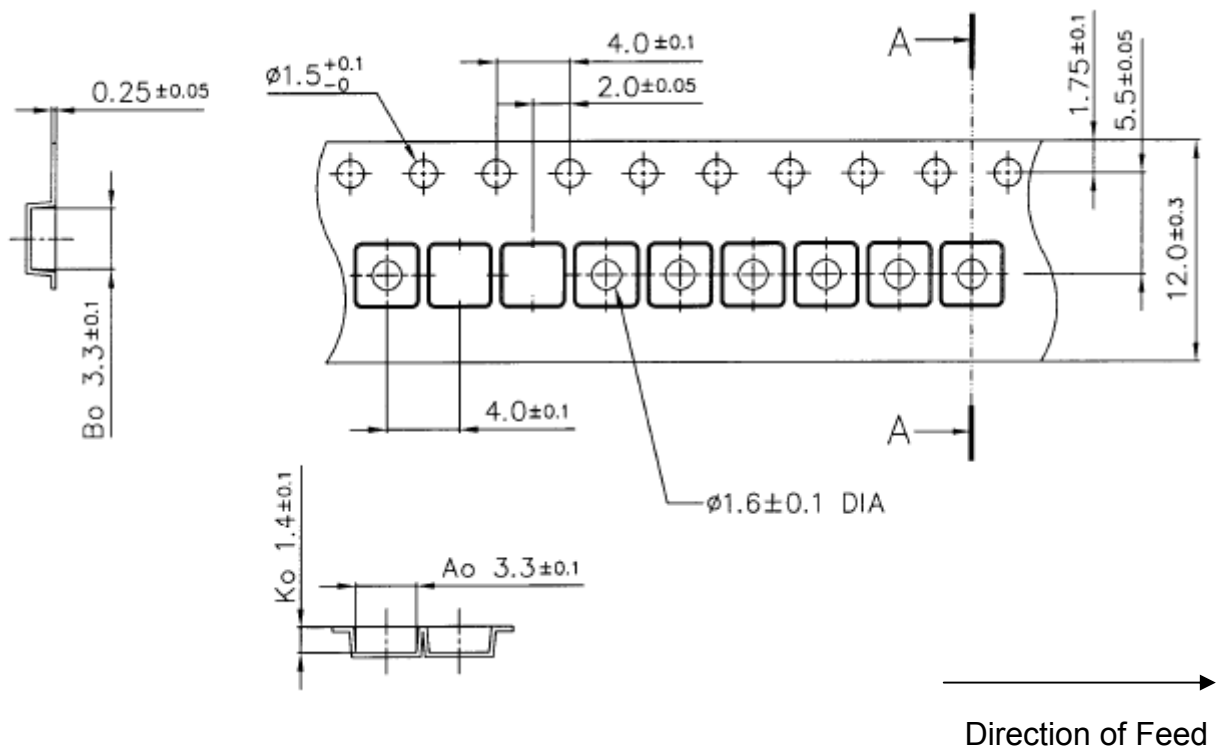
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G. PACKING:

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 sec).
4. Time: 2 times.

