

SAW Filter 869.60MHz

Model: TA1457A

Part No: MP05051

Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device

1. Input Power Level: 10dBm
2. DC Voltage: 6V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	869.6	-
3dB BW	MHz	-	2.0	-
Minimum insertion loss IL(min)				
Exclude loss in matching elements *1)	dB	-	2.4	3.4
Incl. loss of matching elements (Q = 91) *2)	dB	-	2.7	3.7
Passband (relative to IL min) *1)				
869.10 ~ 870.1MHz	dB	-	0.4	3.0
Attenuation (relative to IL min) *1)				
15.00 ~ 785.00MHz	dB	45	52	-
785.00 ~ 850.00MHz	dB	38	46	-
850.00 ~ 858.00MHz	dB	36	42	-
858.00 ~ 867.00MHz	dB	16	26	-
873.00 ~ 878.00MHz	dB	16	23	-
878.00 ~ 896.00MHz	dB	20	26	-
896.00 ~ 912.00MHz	dB	36	42	-
912.00 ~ 1000.0MHz	dB	39	45	-
1000.0 ~ 2000.0MHz	dB	40	46	-
2000.0 ~ 2500.0MHz	dB	55	72	-
Impedance at Fc, Input *1) $Z_{IN} = R_{IN} // C_{IN} Z_S$	Ω	568 Ω //1.12pF		
Impedance at Fc, Output *1) $Z_{OUT} = R_{OUT} // C_{OUT} Z_L$	Ω	568 Ω //1.12pF		

*1). The matching circuit is ideal by simulation.

*2). 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.

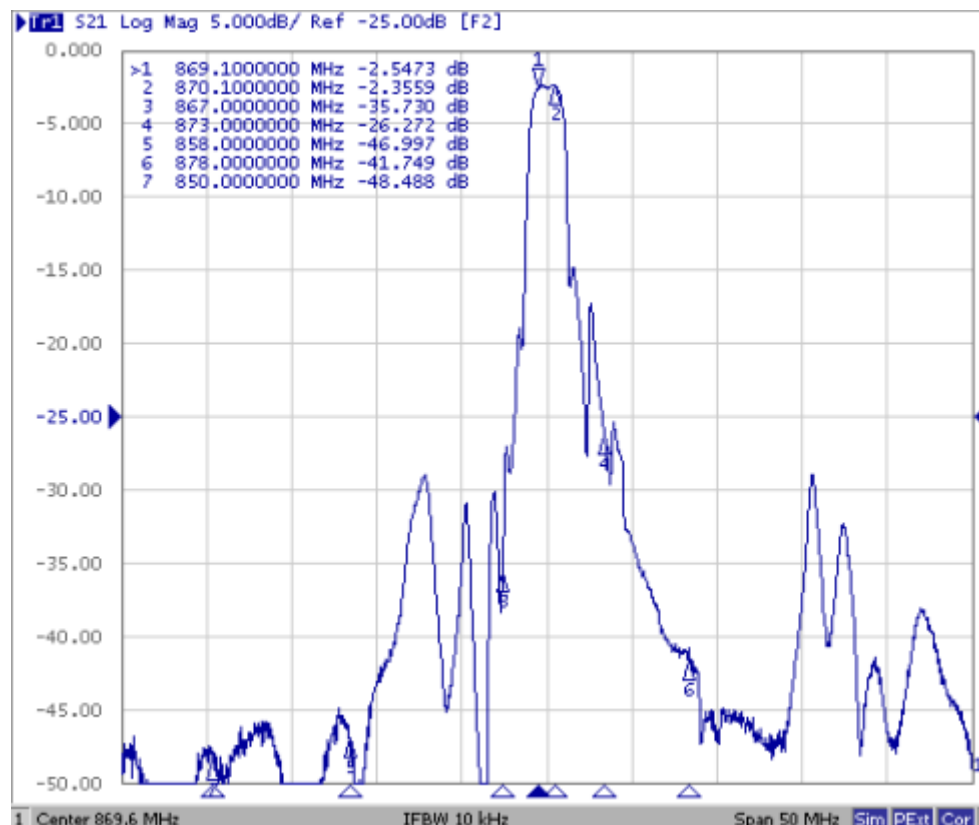
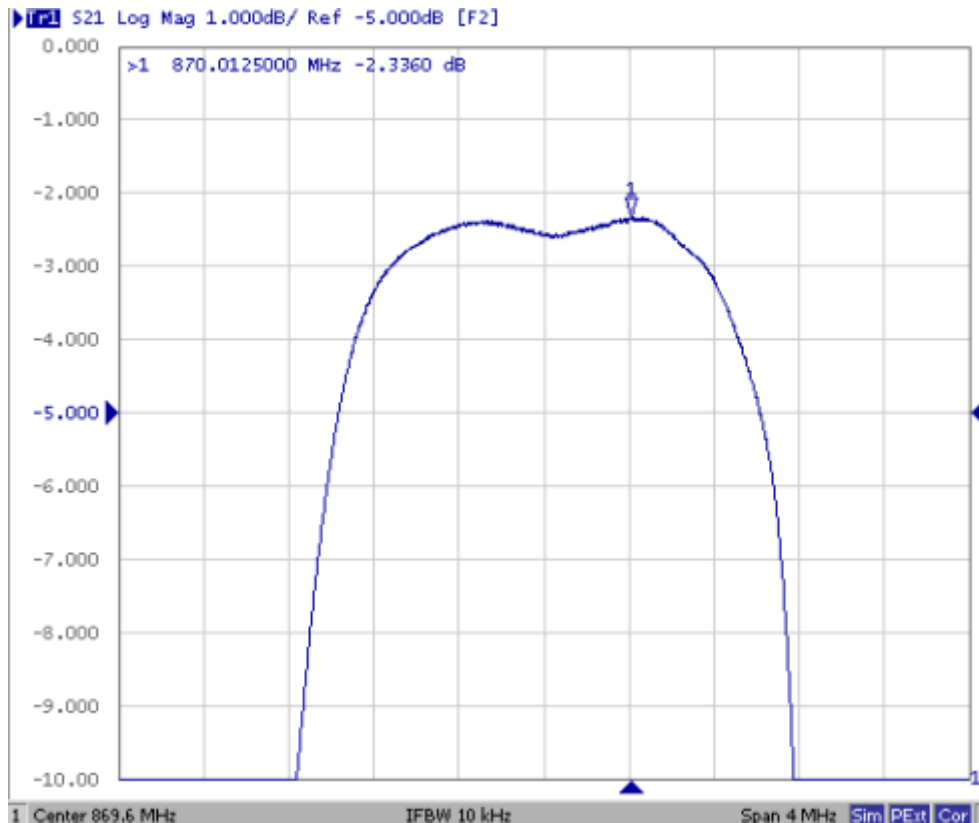
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C. FREQUENCY CHARACTERISTICS:

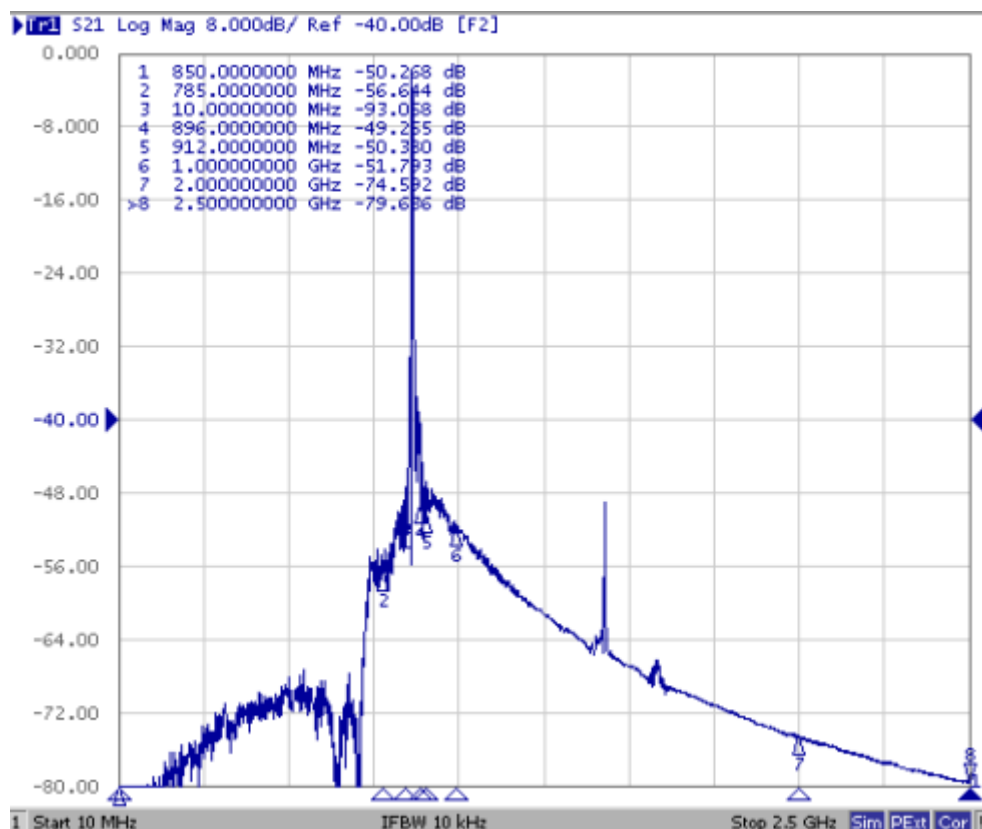


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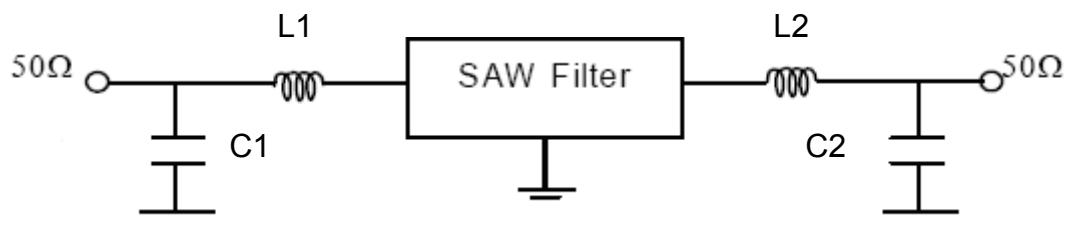
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D. MEASUREMENT CIRCUIT:

The matching circuit is ideal by simulation



L1: 30nH, L2: 30nH (Ideal value)
 C1: 2pF, C2: 2pF (Ideal value)

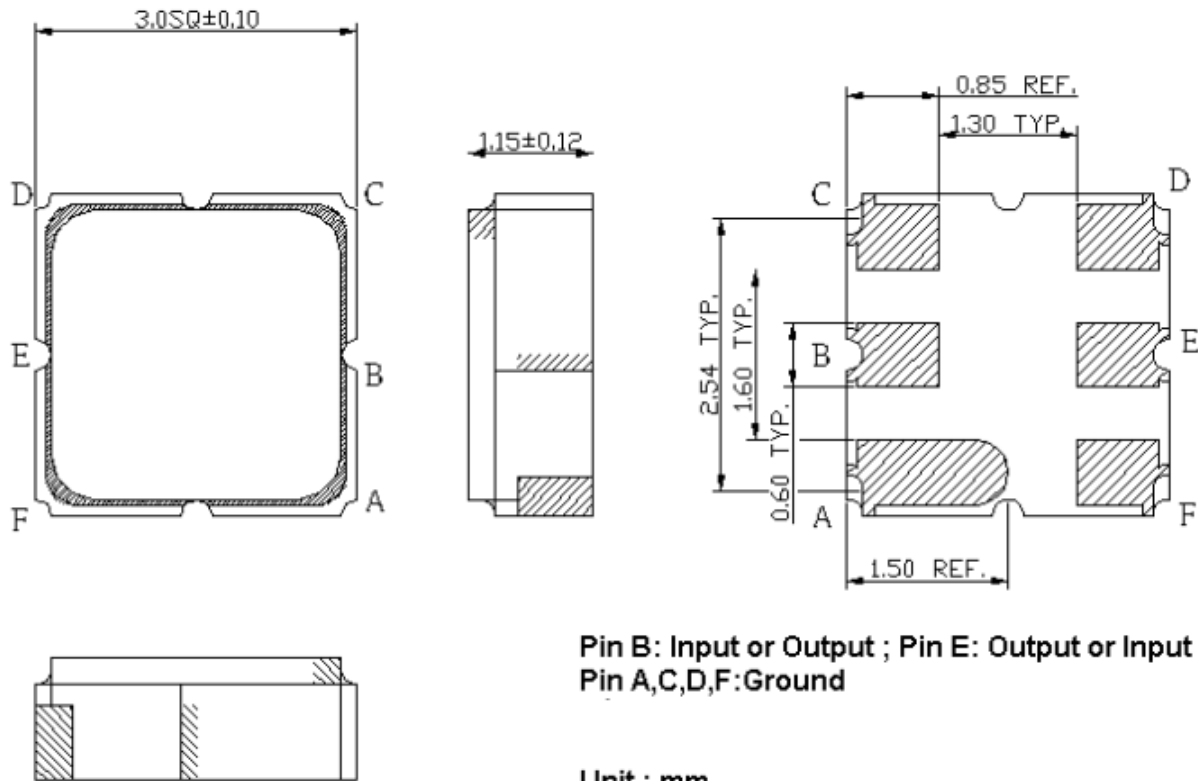
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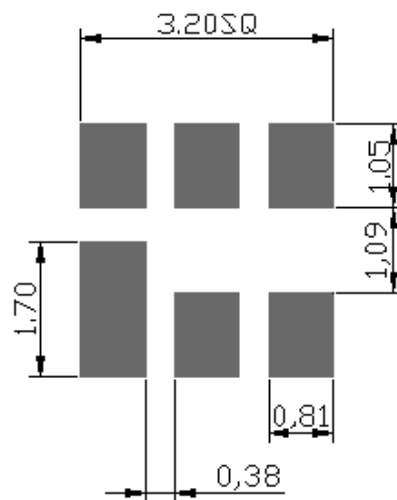
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E. OUTLINE DRAWING:



F. PCB FOOTPRINT:



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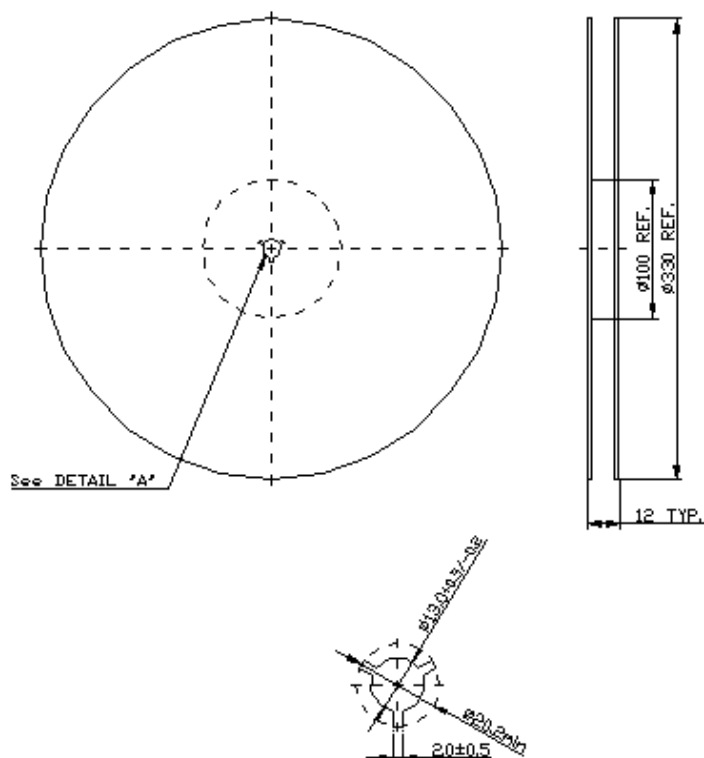
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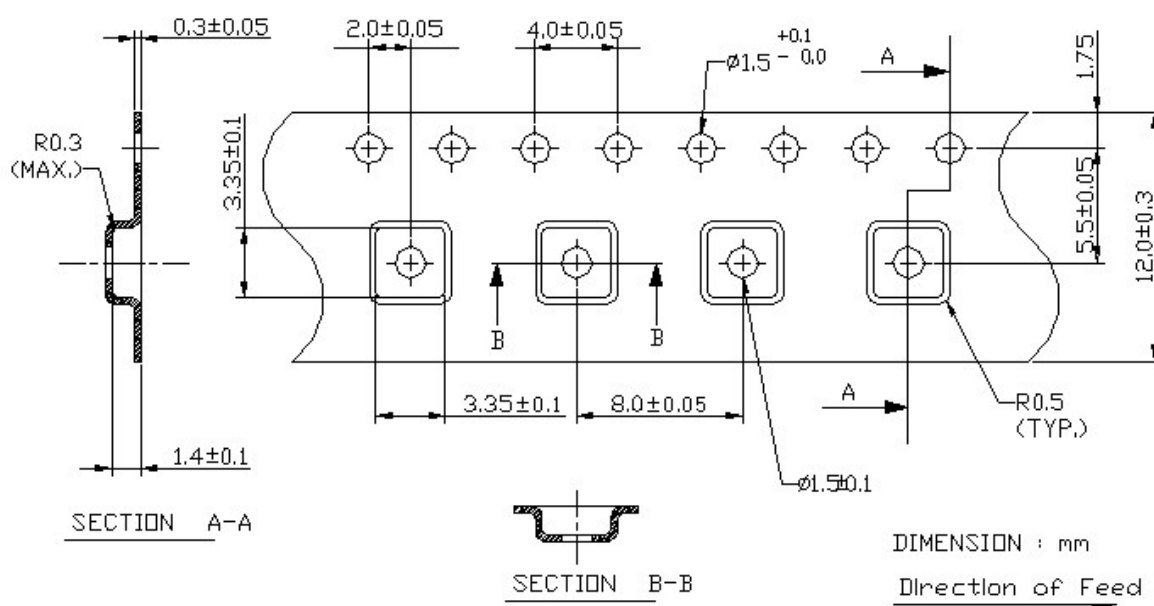
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G. PACKING:

1. Reel Dimension



2. Tape Dimension



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H. RECOMMENDED REFLOW PROFILE:

