

SAW Filter 183.0MHz
Part No: MP05864

Model: TB1013A
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device

1. Operating temperature range: -30°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 15dBm
4. Maximum DC Voltage: 10V

B. CHARACTERISTICS:

Ambient Temperature: 25°C

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	183.0	-
Insertion Loss IL Exclude loss in matching elements *1)	dB	-	9.2	11.0
-1dB bandwidth	MHz	0.050	0.086	-
VSWR Fc ± 0.03MHz	MHz	-	1.4	2.4
Passband Ripple Fc ± 0.01MHz	dB	-	0.1	1.0
Attenuation: (Reference level from Min IL)				
Fc ± 500kHz	dB	40	55	
Fc ± 900kHz	dB	40	50	
Temperature Coefficient	ppm/°C ²	-	-0.036	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

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

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C. FREQUENCY CHARACTERISTICS:

1. Wide band Response: (span 2MHz)

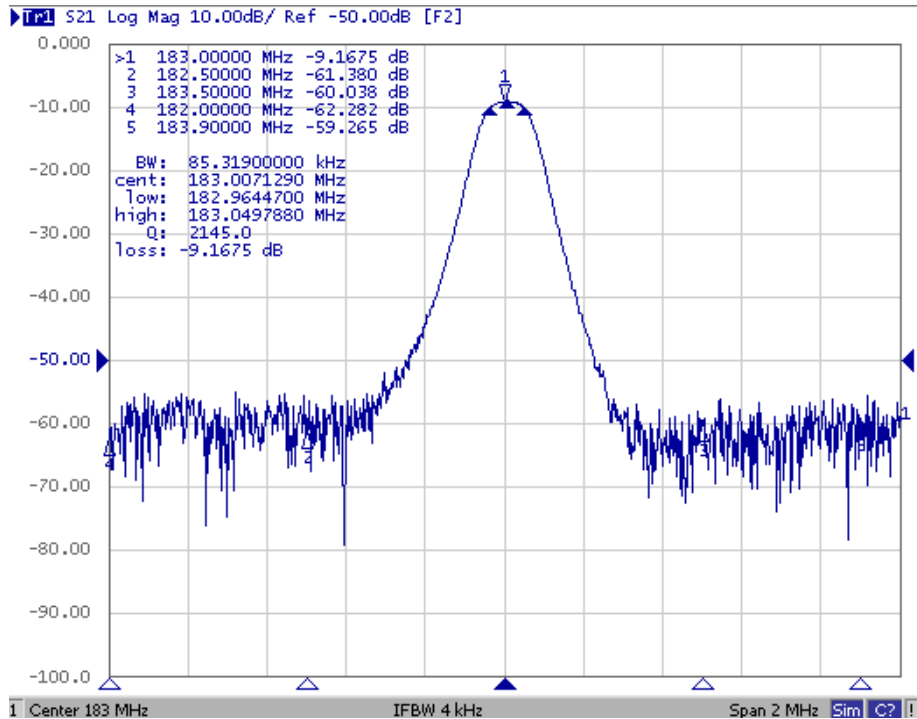
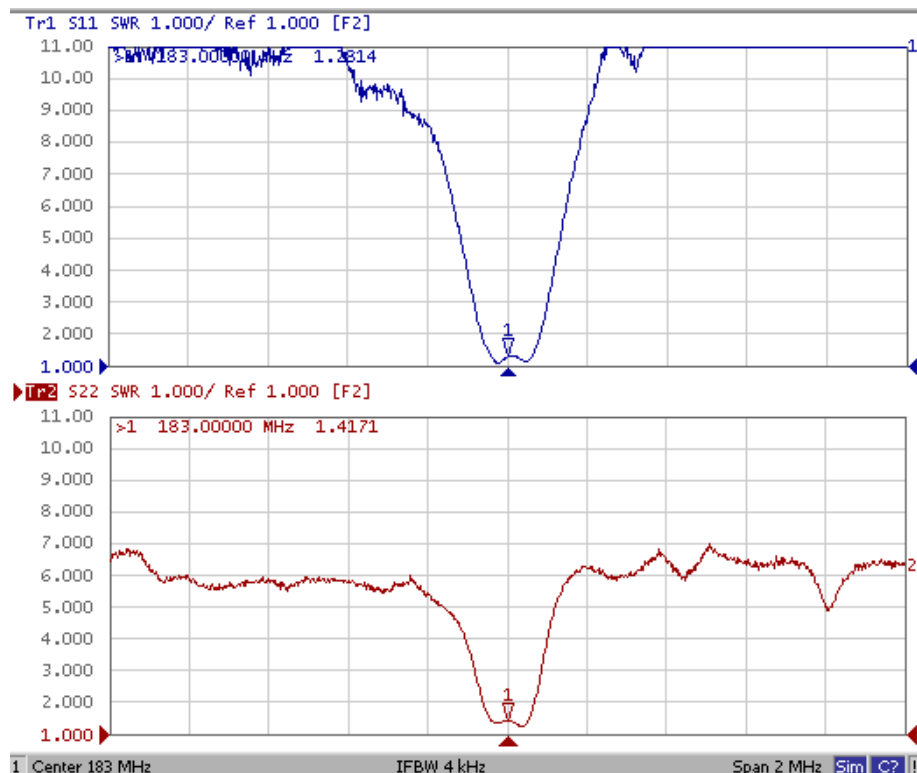


Fig. 1. Horizontal: 0.2MHz / Div, Vertical: 10dB / Div

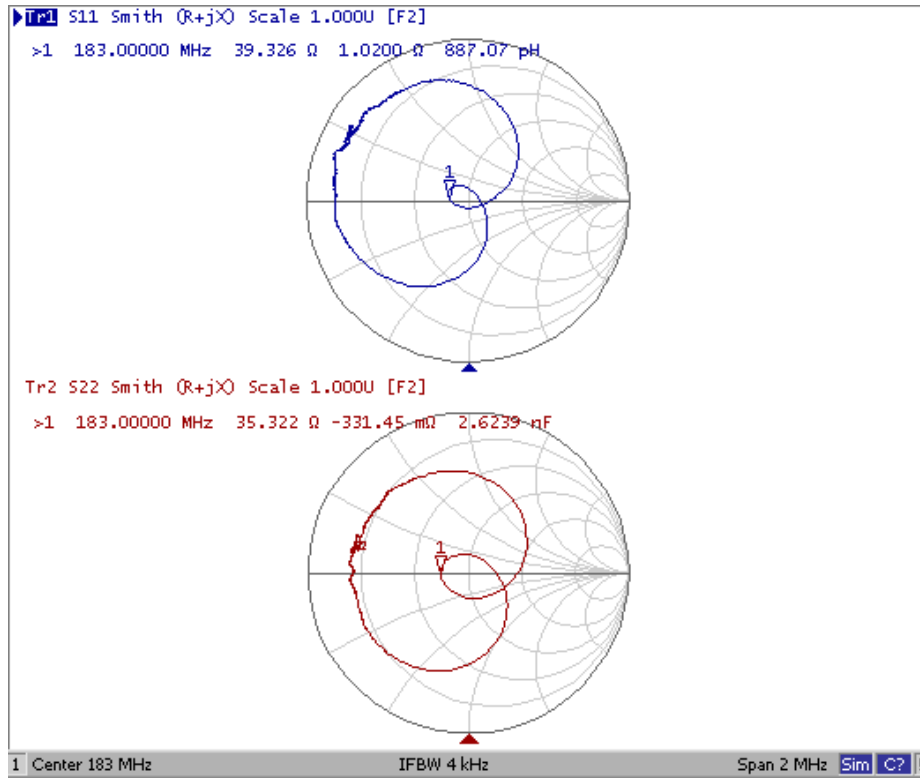
2. VSWR:



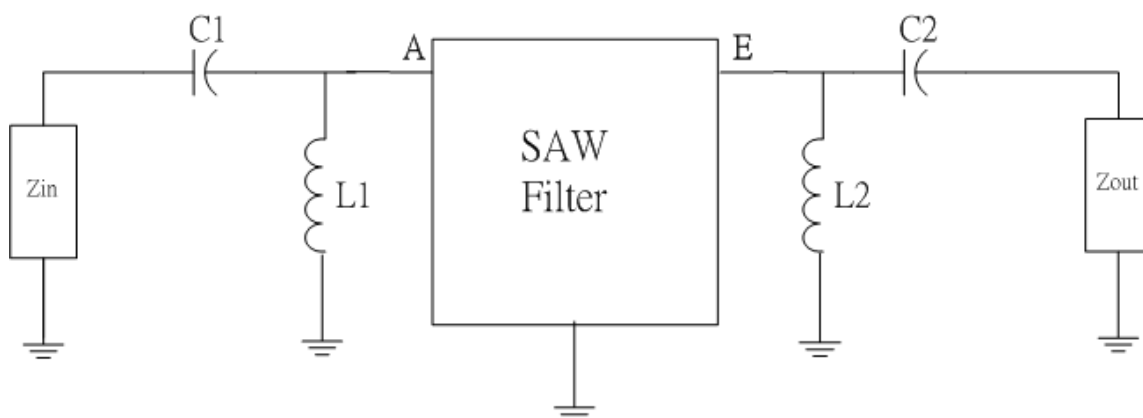
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3. Smith Chart:



D. MATCHING CIRCUIT:

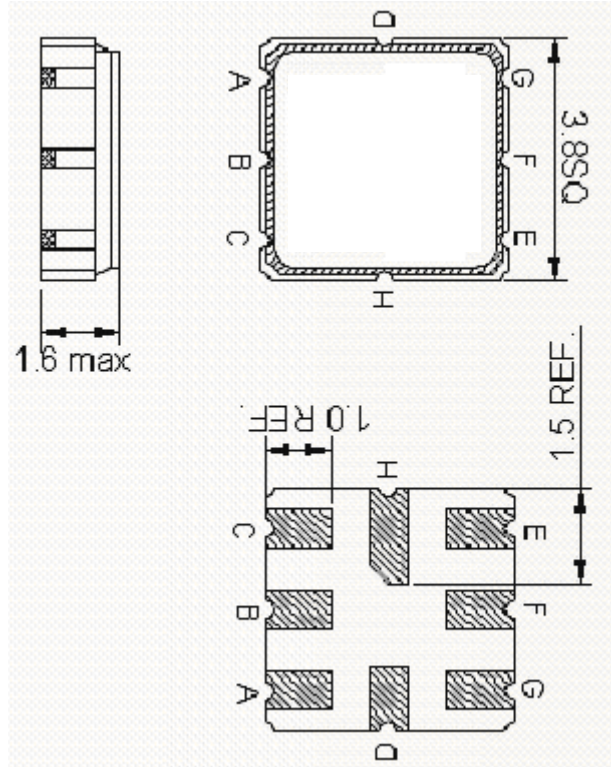


$C1 = 3.6\text{pF}$ $L1 = 94\text{nH}$ $L2 = 90\text{nH}$ $C2 = 3.8\text{pF}$

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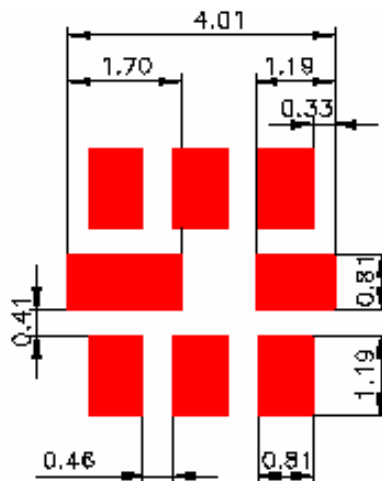
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E. OUTLINE DRAWING:



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

F. PCB FOOTPRINT:

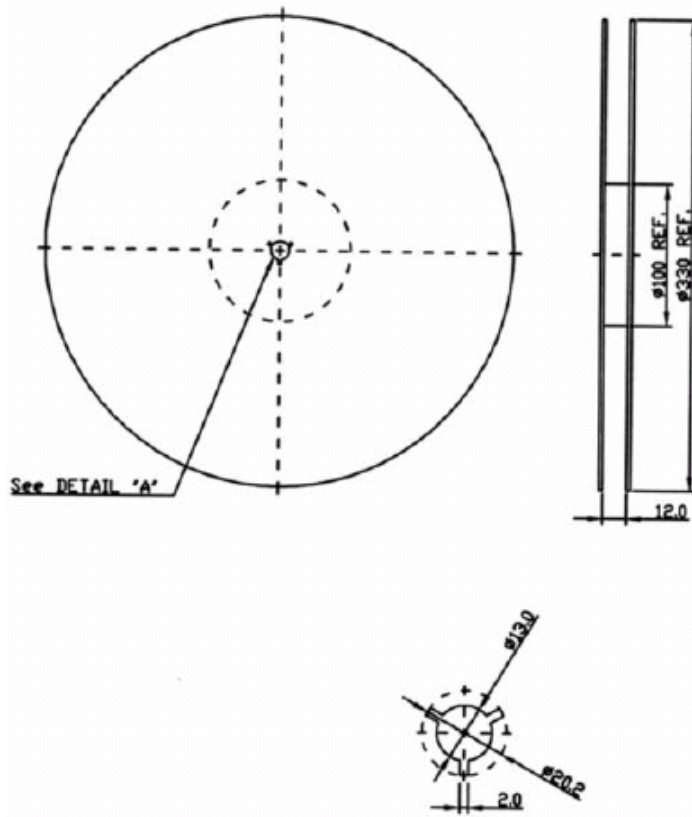


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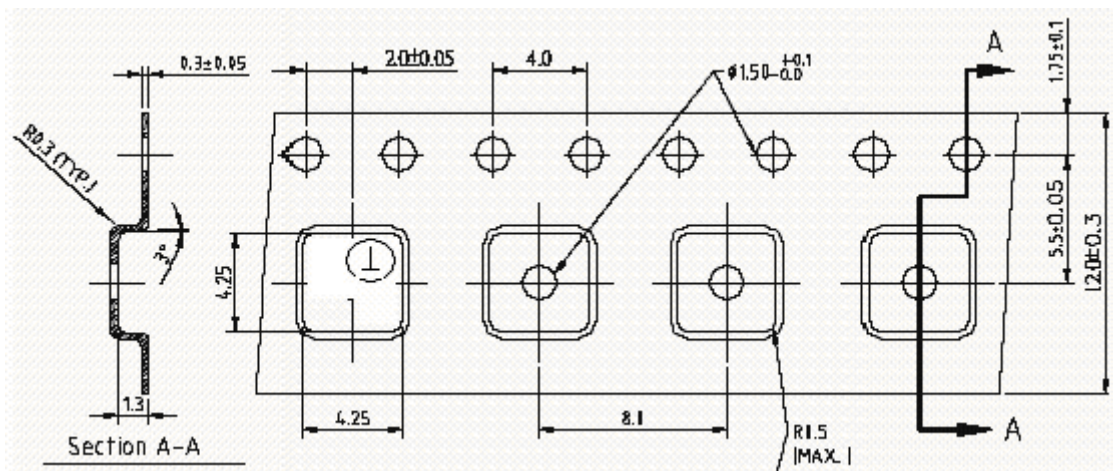
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G. PACKING:

1. Reel dimension



2. Tape Dimension



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H. RECOMMENDED REFLOW PROFILE:

