

**SAW Filter 498.0MHz**

**Model: TB1301A**

**Part No: MP08381**

**Rev No: 1**

**A. MAXIMUM RATING:**

Electrostatic Sensitive Device

1. Operating temperature range: -25°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 20dBm
4. Maximum DC Voltage: 10V
5. Moisture Sensitivity Level: Level 1 (MSL1)

**B. CHARACTERISTICS:**

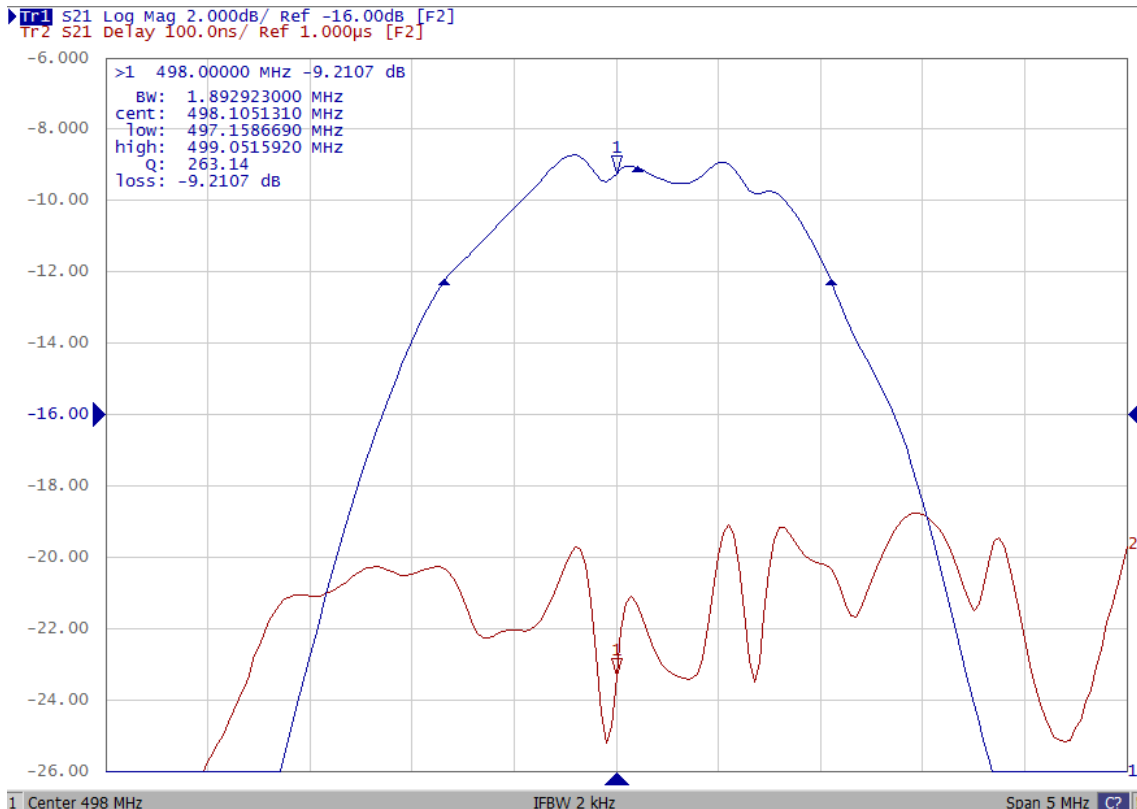
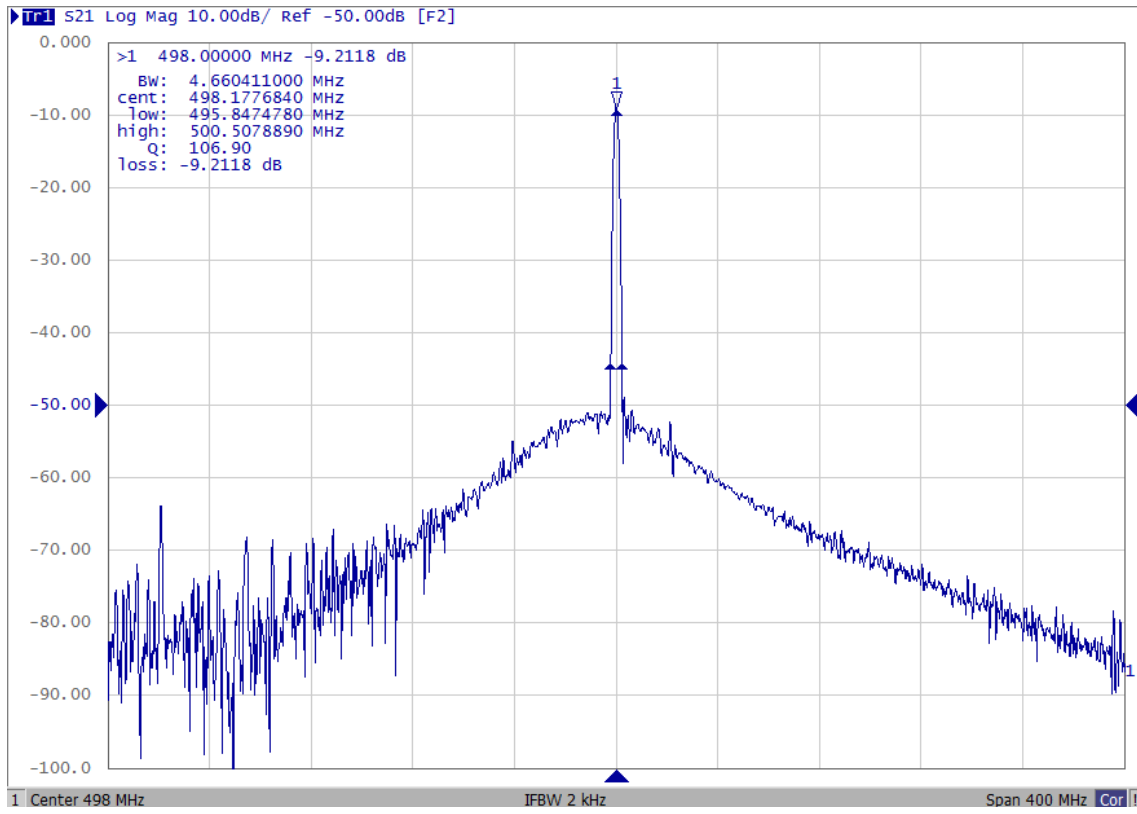
Temperature range for specification: T = 25°C

Item	Unit	Min.	Typ.	Max.
Center frequency Fc	MHz	-	498	-
Insertion Loss IL	dB	-	8.7	10.0
-3dB Lower Frequency	MHz	-	497.1	497.5
-3dB Upper Frequency	MHz	498.5	499.0	-
-35dB Lower Frequency	MHz	495	495.8	-
-35dB Upper Frequency	MHz	-	500.5	501
Passband Ripple Fc ±100kHz	MHz	-	0.5	1.0
Attenuation:(Reference level from Min IL)				
Fc -200MHz ~ Fc -10MHz	dB	40	43	-
Fc -10MHz ~ Fc -3MHz	dB	35	43	-
Fc +3MHz ~ Fc +10MHz	dB	35	40	-
Fc +10MHz ~ Fc +200MHz	dB	40	44	-
Temp. Coefficient	ppm/°C <sup>2</sup>	-	-0.036	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

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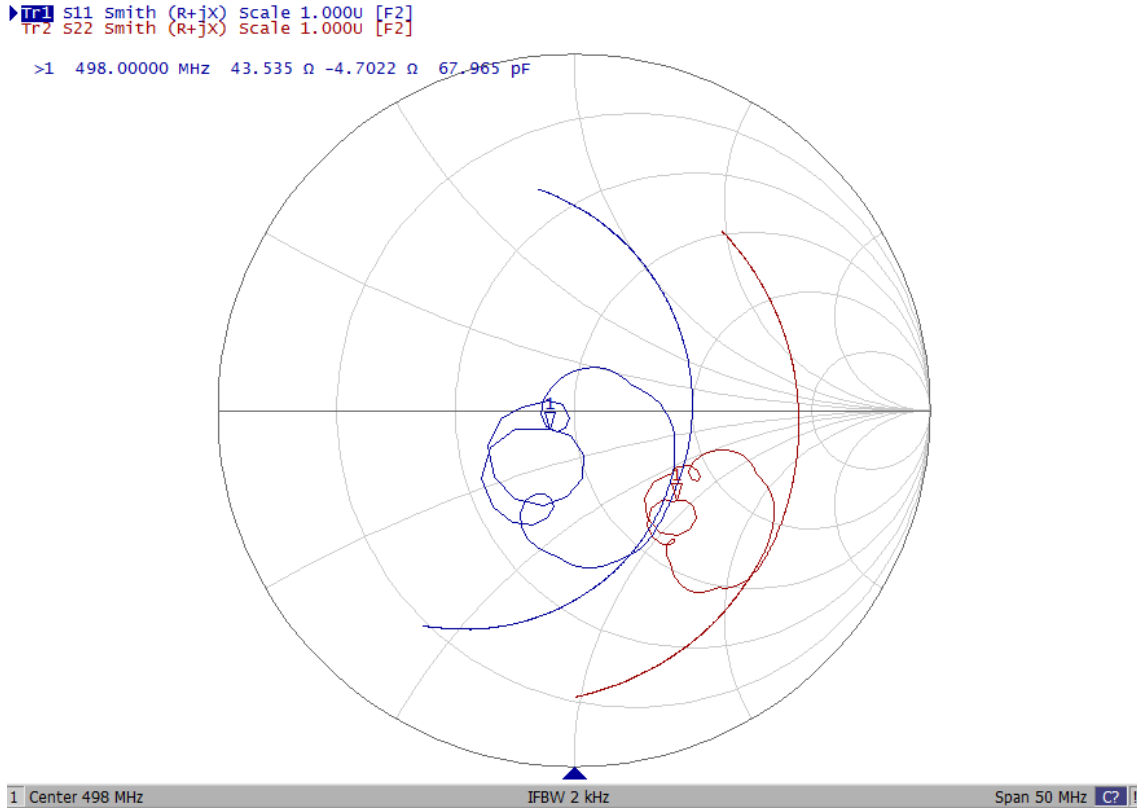
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**C. FREQUENCY CHARACTERISTICS:**

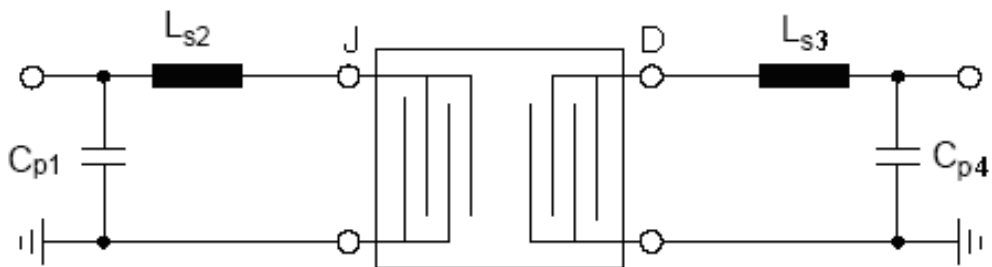


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**D. MATCHING CIRCUIT:**

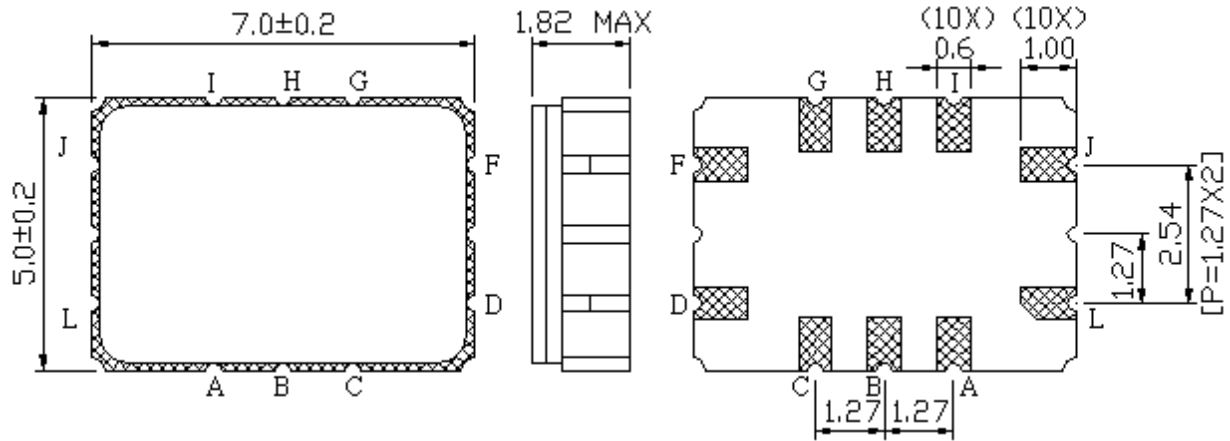


L1 = 12nH, L2 = 15nH, C1 = 18pF, C2 = 12pF

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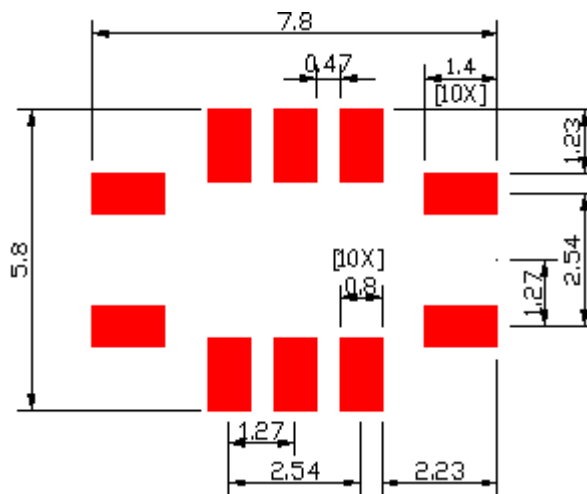
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**E. OUTLINE DRAWING:**



J: RF Input  
 D: RF Output  
 A, B, C, F, G, H, I, L: To be ground  
 Unit: mm

**F. PCB FOOTPRINT:**

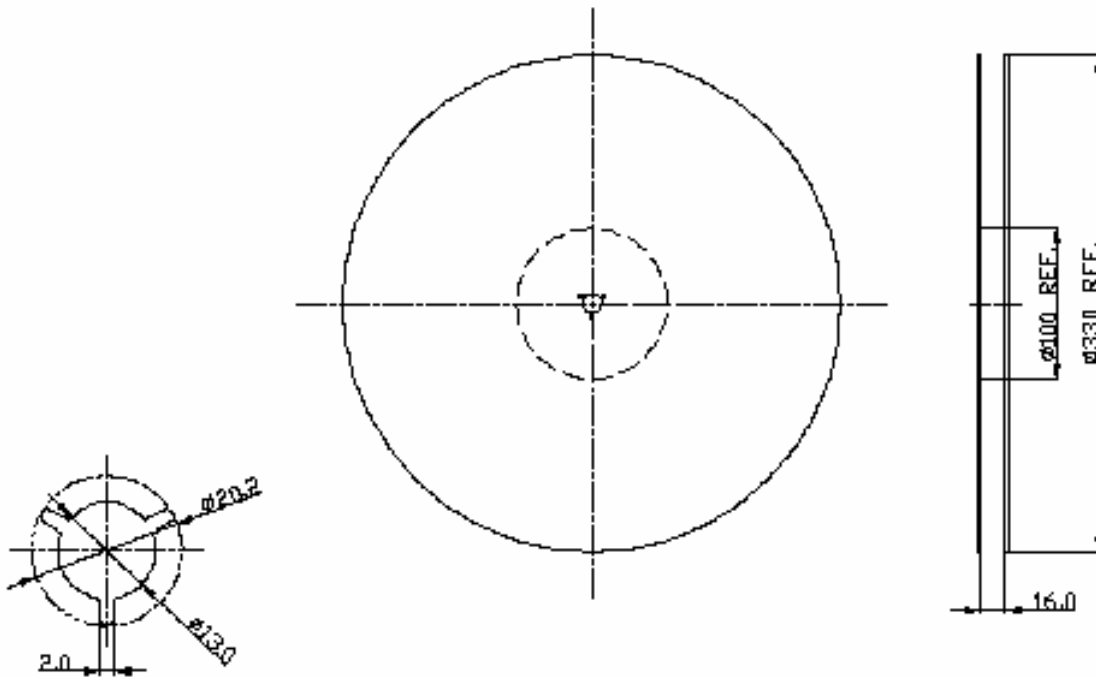


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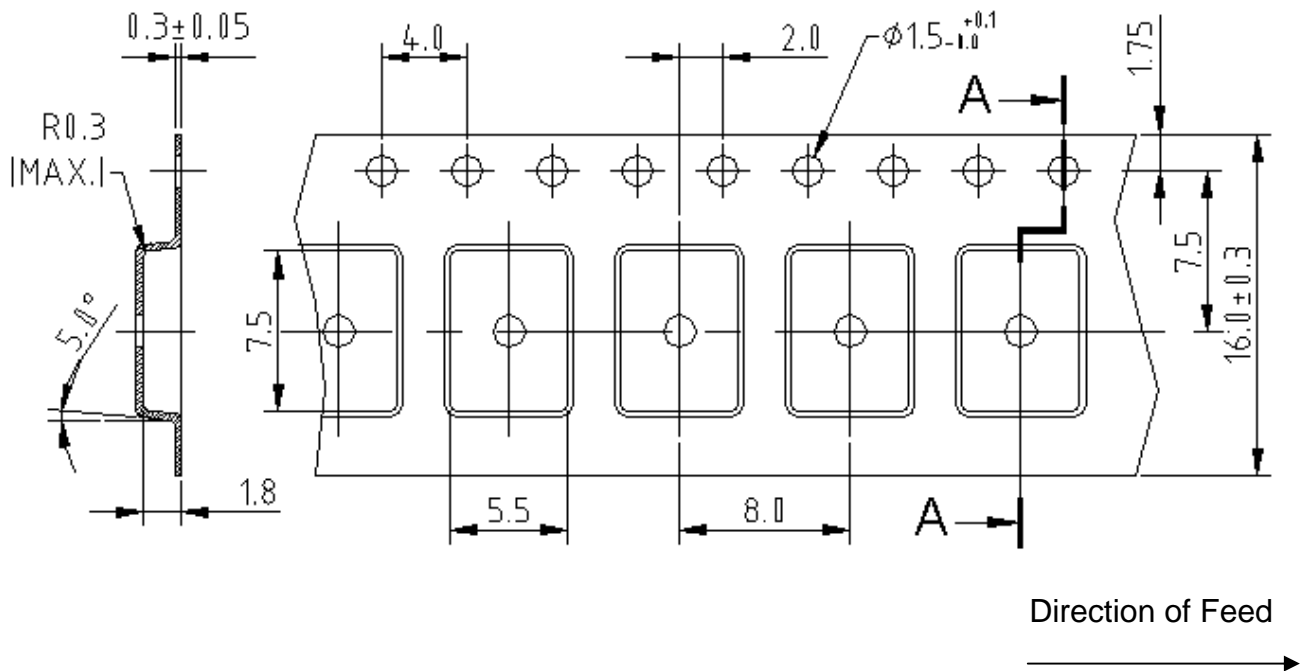
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**G. PACKING:**

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.

