

**SAW Filter 352.0MHz**

**Model: TB352FD-1**

**Part No: MA09411**

**Rev. No: 3**

**A. MAXIMUM RATING:**

Electrostatic Sensitive Device

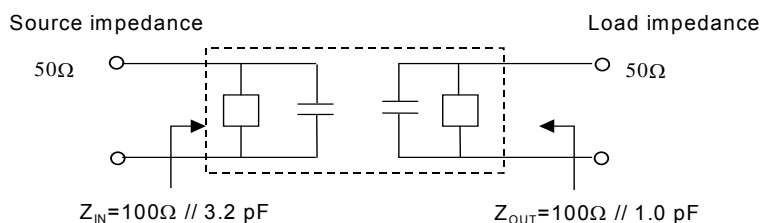
1. Input Power Level: 10dBm
2. DC voltage: 0V<sub>DC</sub>
3. Operating Temperature: -25°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1 (MSL1)

**B. ELECTRICAL CHARACTERISTICS:**

Item	Min.	Typ.	Max.	Note
Center frequency Fc (MHz)	-	352	-	1
Minimum Insertion loss IL min (dB)	-	2.5	3.5	1
Amplitude Ripple within 346 ~ 358MHz (dB)	-	1.4	3.0	1
Group Delay Ripple within:				
346.0 ~ 358MHz (ns)	-	50	170	1
346.5 ~ 358MHz (ns)	-	45	120	
Pass Bandwidth BW -3dB (MHz)	14.0	15.5		
Attenuation: (Reference level from IL min) (dB)				
300 to 333MHz (dB)	45	55	-	
333 to 341MHz (dB)	11	34	-	
363 to 366MHz (dB)	11	18	-	1
366 to 371MHz (dB)	22	25	-	
371 to 374MHz (dB)	25	35	-	
374 to 392MHz (dB)	34	36	-	
392 to 400MHz (dB)	45	54	-	
Impedance at Fc: Input: Z <sub>IN</sub> = R <sub>IN</sub> // C <sub>IN</sub> Output: Z <sub>OUT</sub> = R <sub>OUT</sub> // C <sub>OUT</sub>			100Ω // 3.2pF 100Ω // 1.0pF	2

Note 1: The standard definition is in JIS C 6703.

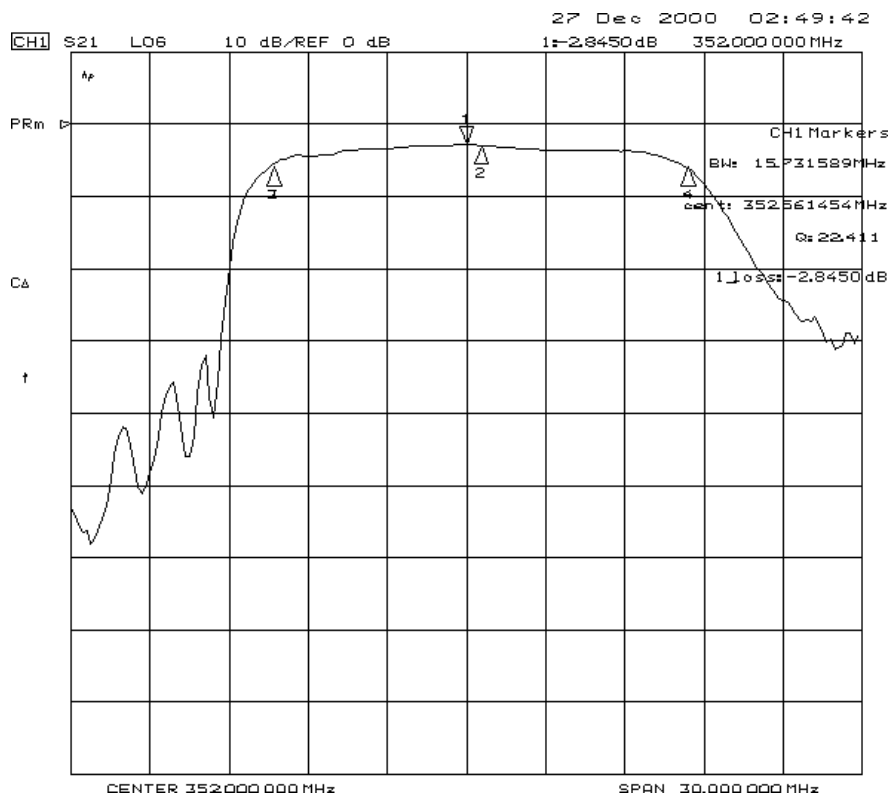
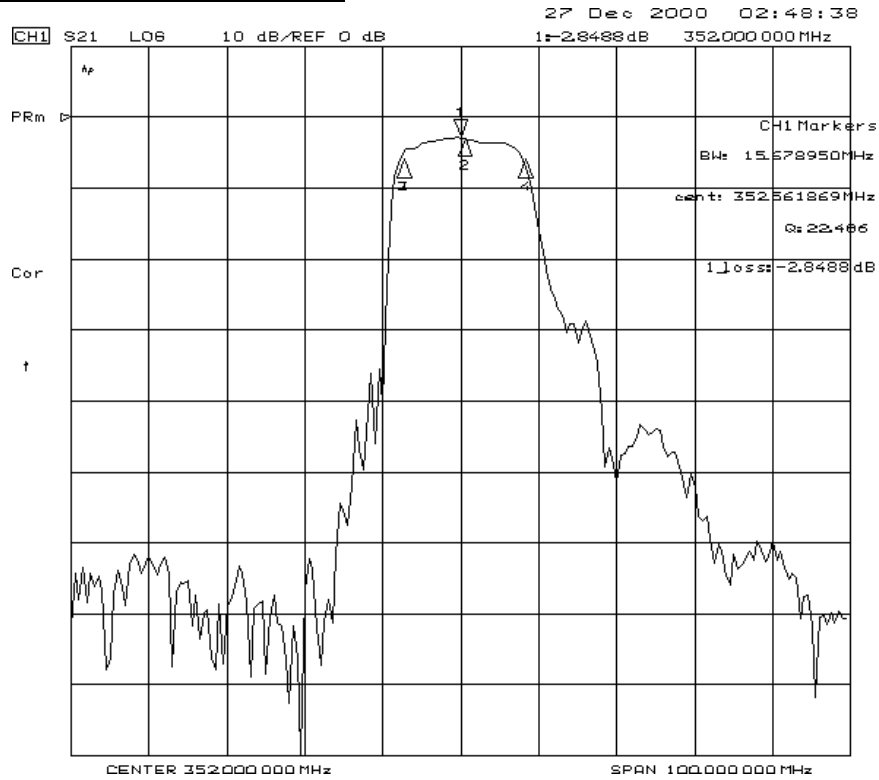
Note 2:



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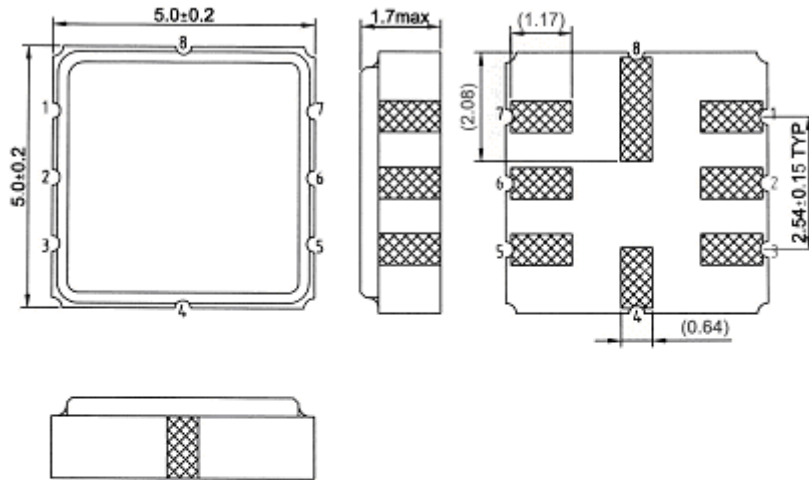
**C. FREQUENCY CHARACTERISTICS:**



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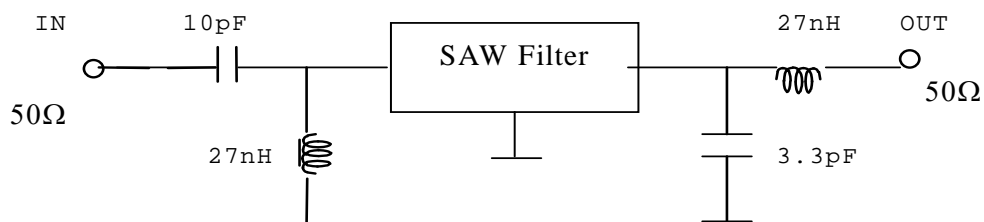
**D. OUTLINE DRAWING:**



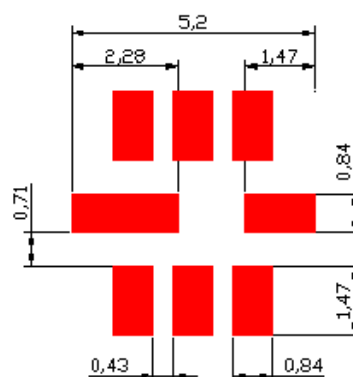
- #2 ~ 3 : Input, Input Ground or bal. Input
- #6 ~ 7 : Output, Output Ground or bal. Output
- #1 ~ 5 : Ground
- #4 ~ 8 : Case Ground

**E. MEASUREMENT CIRCUIT:**

HP Network analyzer



**F. PCB FOOTPRINT:**

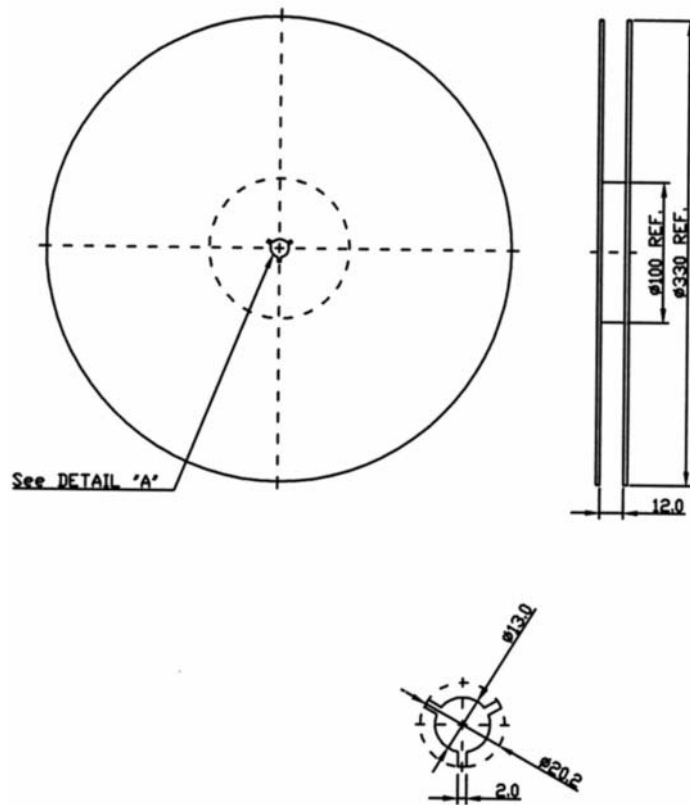


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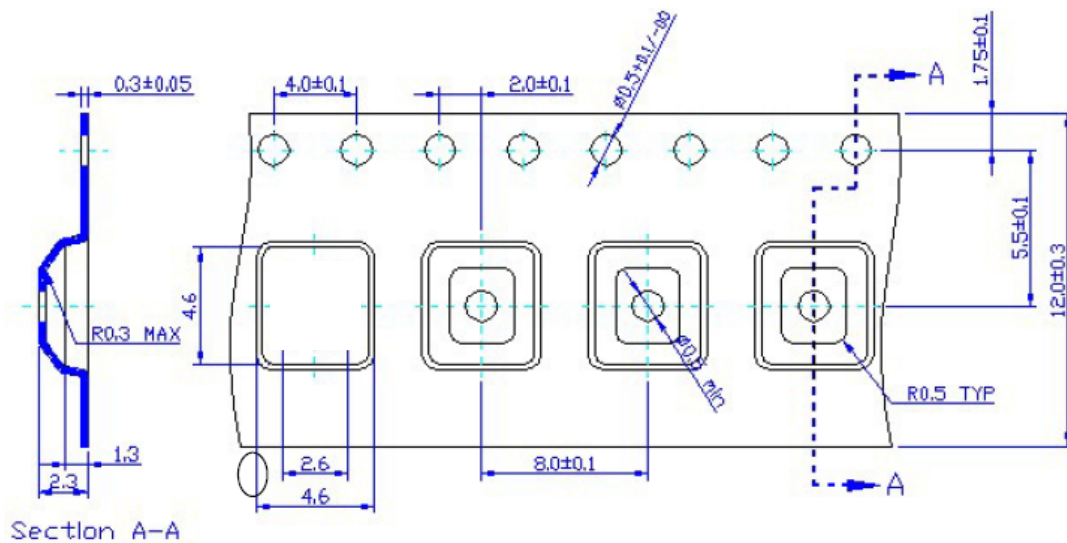
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**G. PACKING:**

1. Reel dimension:



2. Tape dimension:



Direction of Feed  $\longrightarrow$

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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.

