

**SAW Filter 500.0MHz**  
**Part No: MP09180**

**Model: TA2047A**  
**Rev No: 1**

**A. MAXIMUM RATING:**

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm
2. DC Voltage: 5V
3. Operating Temperature: -30°C to +60°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1

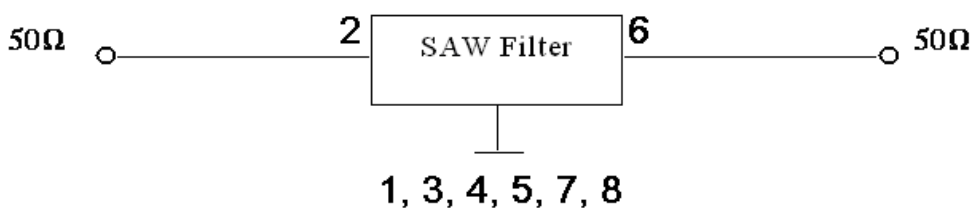
**B. ELECTRICAL CHARACTERISTICS:**

1. Terminating source impedance (single):  $Z_S = 50\Omega$
2. Terminating load impedance (single):  $Z_L = 50\Omega$

Item	Unit	Min	Typ.	Max
Center frequency	MHz	-	500	-
Insertion Loss (490 ~ 510MHz)	dB	-	2.4	2.8
2dB Band Width	MHz	20	24	-
Attenuation (Reference level from 0dB)				
100 ~ 300MHz	dB	50	57	-
0400 ~ 0455MHz	dB	40	55	-
0514 ~ 0535MHz (@-25°C to +55°C)	dB	5	10	-
0545 ~ 0555MHz	dB	30	55	-
0555 ~ 0600MHz	dB	40	55	-
Temperature Coefficient of Frequency	ppm/°C	-	-36	-

**C. TEST CIRCUIT:**

HP Network analyzer

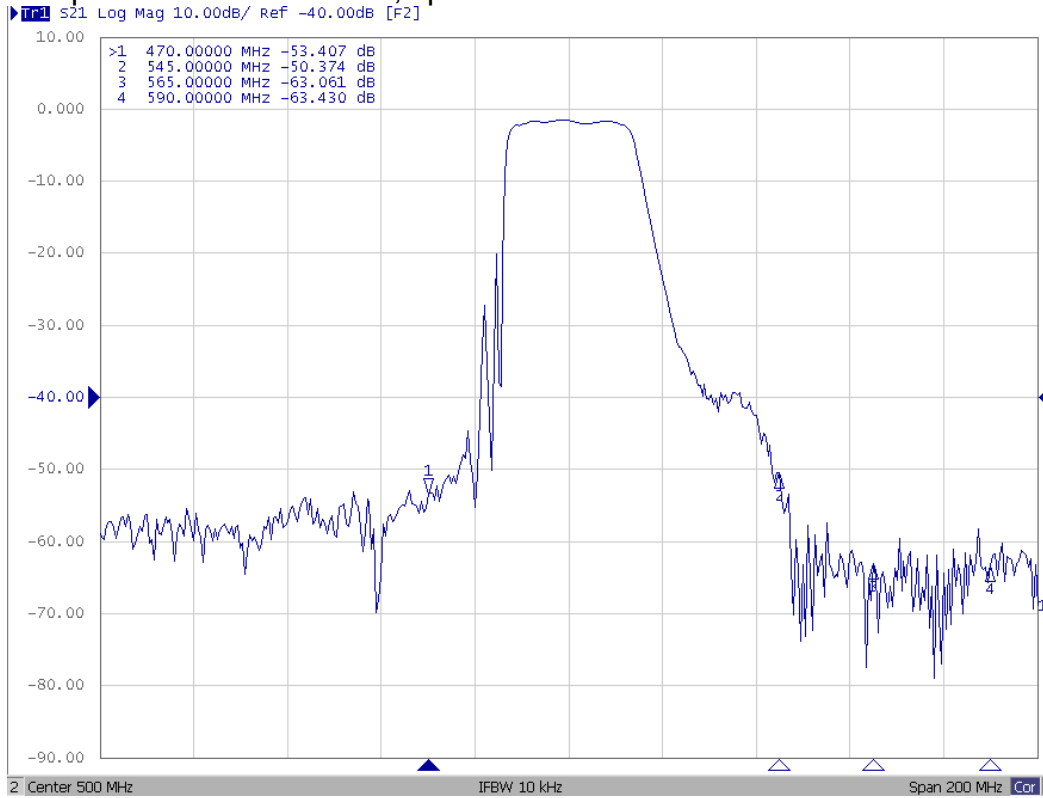


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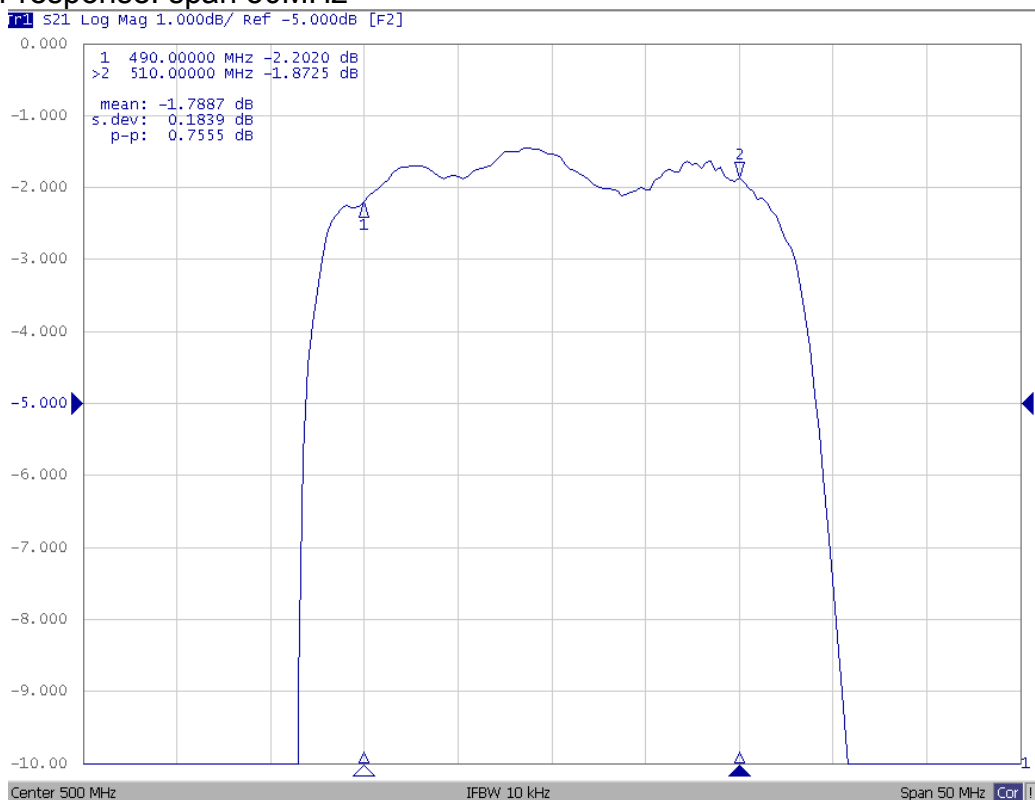
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**D. FREQUENCY CHARACTERISTICS:**

**1. S21 response: center 500MHz, span 200MHz**



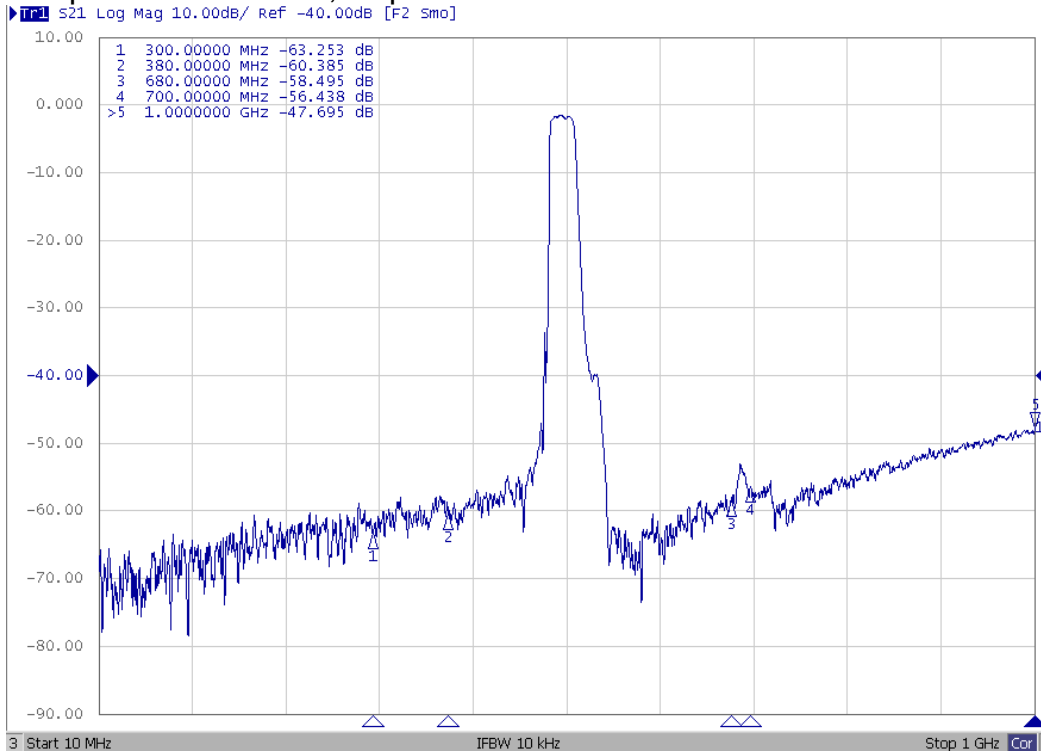
**2. S21 response: span 50MHz**



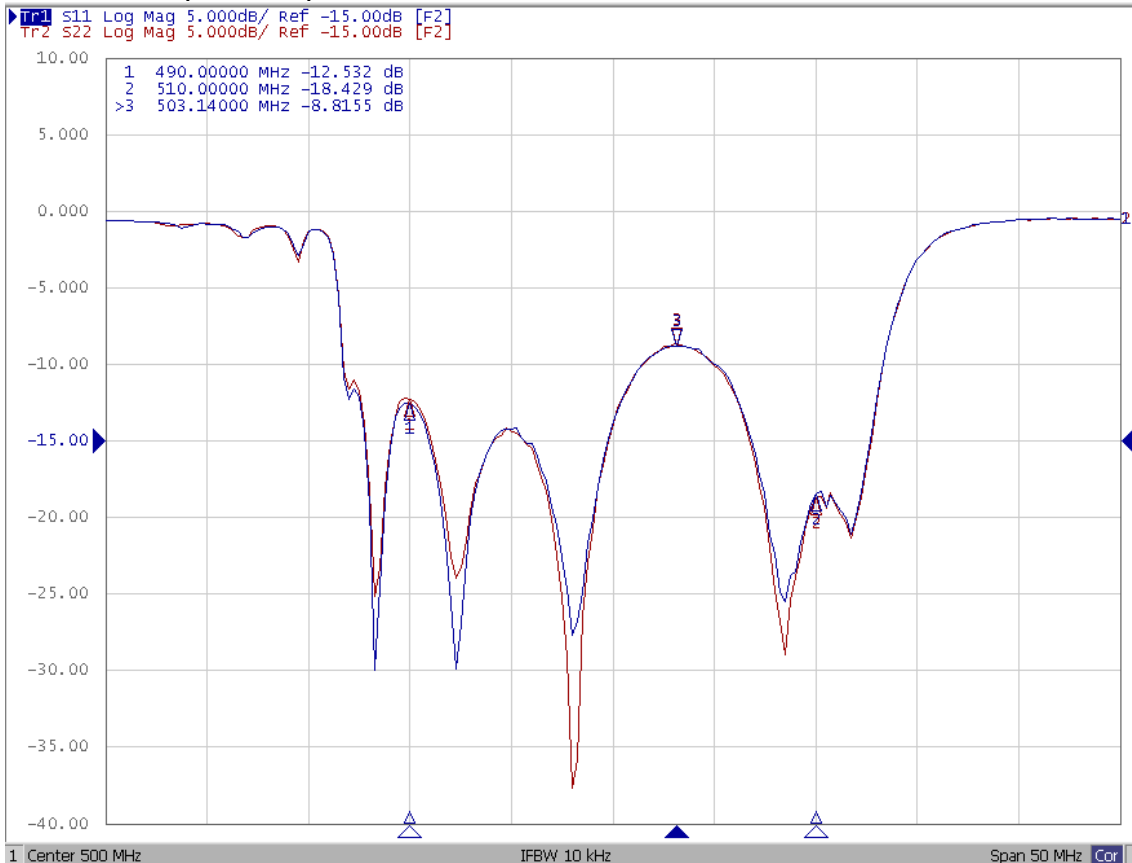
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3. S21 response: start 0MHz, stop 1000MHz



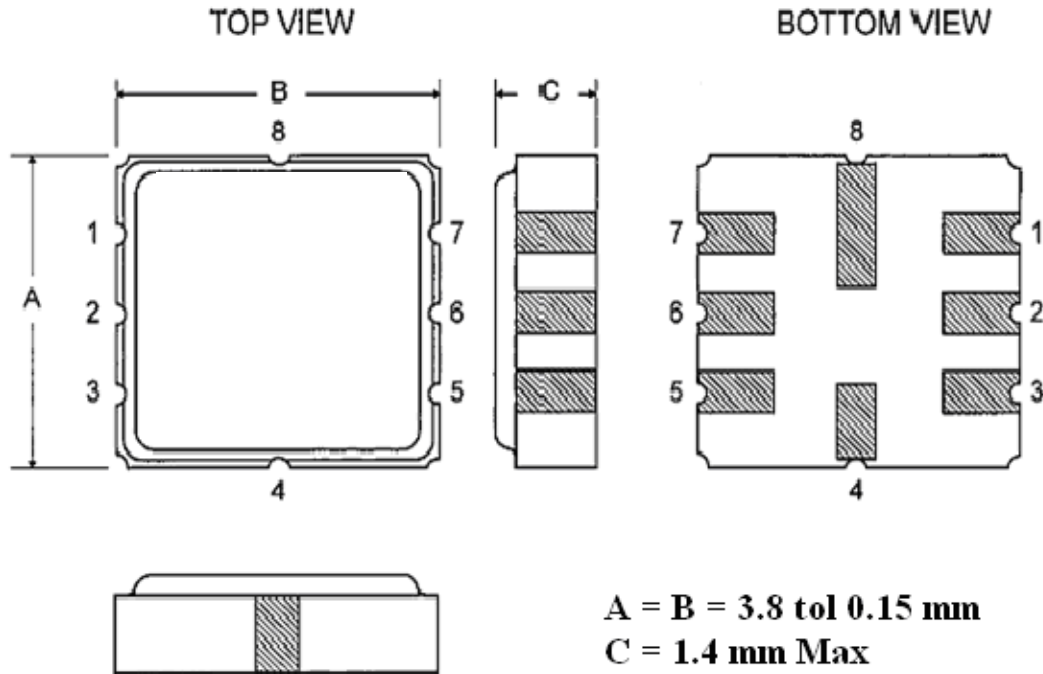
4. S11, S22 response: span 50MHz



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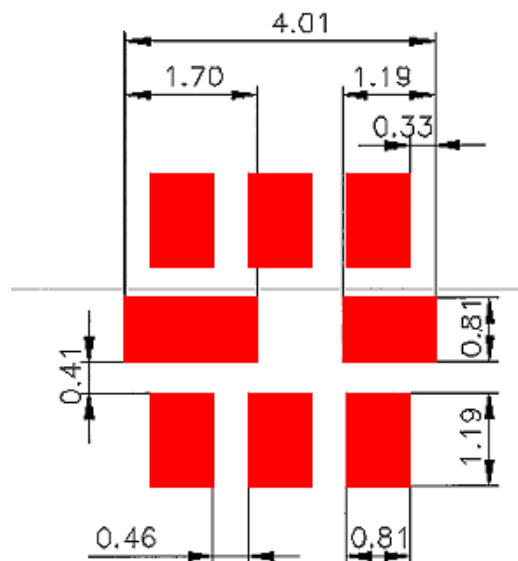
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**E. OUTLINE DRAWING:**



2: Input  
 6: Output  
 Others: Ground  
 Unit: mm

**F. PCB FOOTPRINT:**

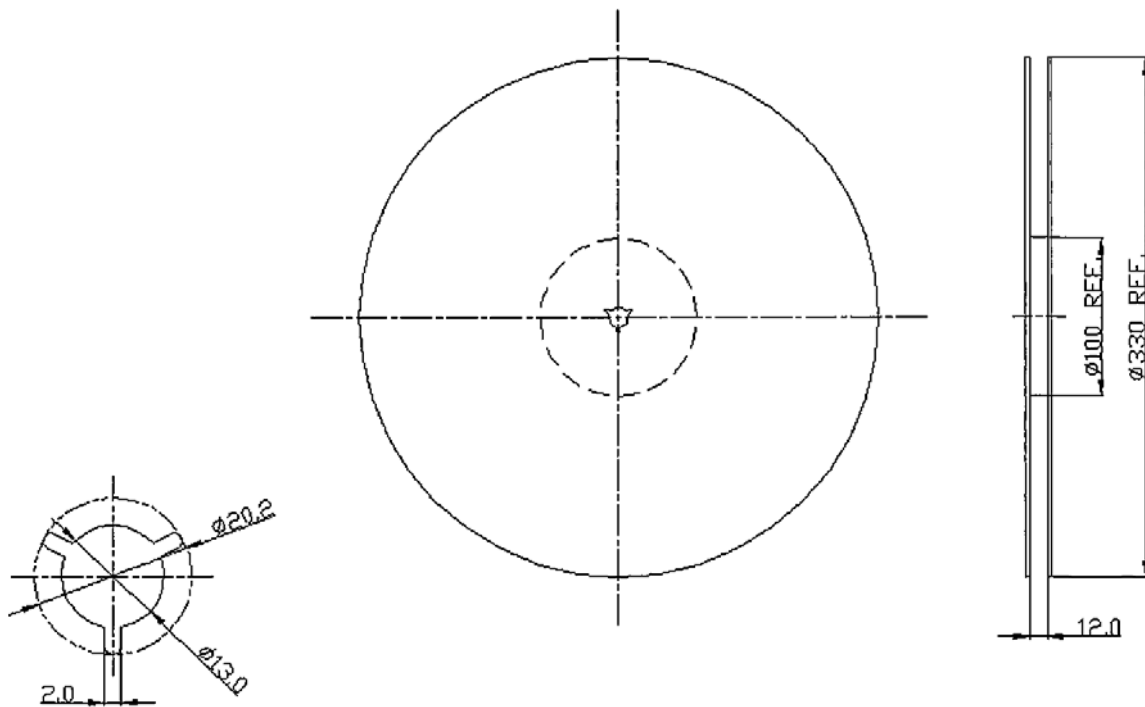


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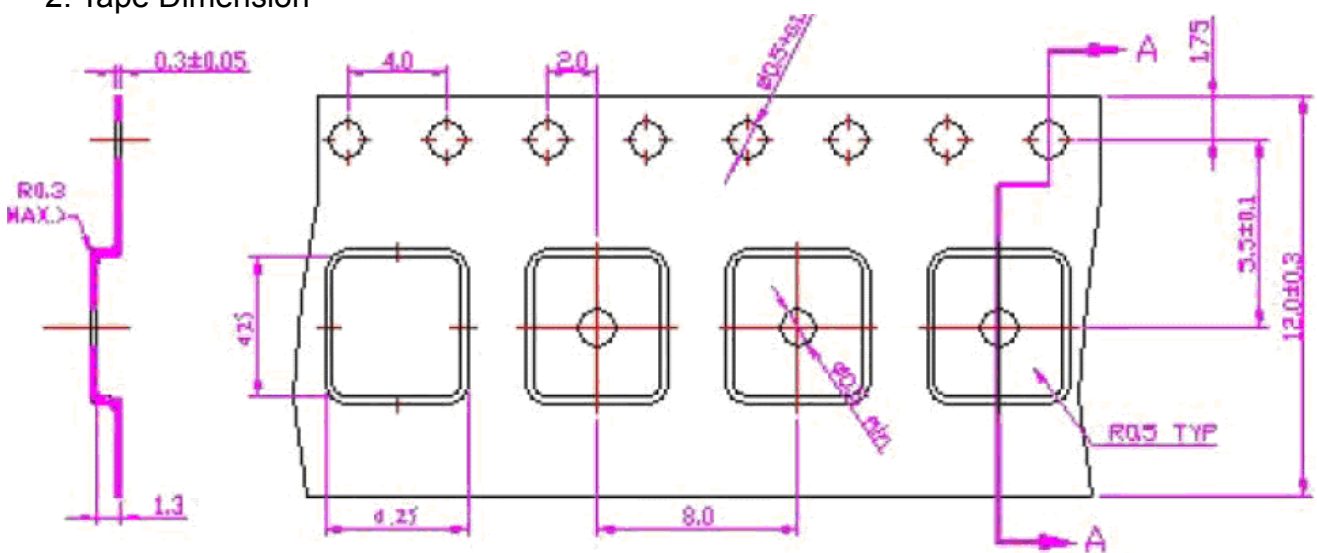
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**G. PACKING:**

1. Reel Dimension



2. Tape Dimension



Section A-A

Direction of Feed



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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.

