**SAW Filter 121.50MHz**

**Model:** TA1952A  
**Part No:** MP07593  
**Rev No:** 1

### A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 15dBm
2. DC Voltage: 10V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -45°C to +90°C

### B. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc</td>
<td>MHz</td>
<td>-</td>
<td>121.5</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (121.475 ~ 121.525MHz) IL</td>
<td>dB</td>
<td>-</td>
<td>1.4</td>
<td>2.5</td>
</tr>
<tr>
<td>Bandwidth @ -1dB</td>
<td>MHz</td>
<td>0.05</td>
<td>1.75</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude Ripple (121.475 ~ 121.525MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.1</td>
<td>1.2</td>
</tr>
</tbody>
</table>

#### Attenuation (Reference level from 0dB)

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>dB</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>101.5 ~ 113.5MHz</td>
<td>40</td>
<td>52</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>113.5 ~ 116.5MHz</td>
<td>20</td>
<td>31</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>116.5 ~ 118.5MHz</td>
<td>15</td>
<td>35</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>118.5 ~ 119.3MHz</td>
<td>5</td>
<td>58</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>123.7 ~ 124.5MHz</td>
<td>5</td>
<td>15</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>124.5 ~ 126.5MHz</td>
<td>12</td>
<td>16</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>126.5 ~ 129.5MHz</td>
<td>16</td>
<td>22</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>129.5 ~ 141.5MHz</td>
<td>36</td>
<td>41</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

#### Temperature coefficient of frequency

<table>
<thead>
<tr>
<th>ppm/k</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>-32</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### C. MEASUREMENT CIRCUIT:

![Measurement Circuit Diagram](image)
SAW Filter 121.50MHz
Part No: MP07593

D. OUTLINE DRAWING:

[Diagram of the outline drawing with pin configuration:
- #9 Input
- #4 Output
- #10 Input ground
- #5 Output ground
- #1, 2, 3, 6, 7, 8 To be grounded]

E. PCB FOOTPRINT:

[Diagram of the PCB footprint with dimensions and markings]
F. FREQUENCY CHARACTERISTICS:

[Graphs showing frequency characteristics with data points listed below]

- Frequency: 121.50MHz
- Model: TA1952A
- Part No: MP07593
- Rev No: 1

[Graphs illustrating the frequency characteristics with specific frequency values and corresponding db levels listed in a tabular format]
G. PACKING:

1. Reel Dimension (Please refer to FR-75D10 for packing quantity)

   ![Diagram of reel dimension]

2. Tape Dimension

   ![Diagram of tape dimension]

Section A-A

Direction of Feed

TA1952A v1
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 ~ 40sec).
4. Time: 2 times.