SAW Filter 156.5250MHz  
Part No: MP07387  
Rev No: 1

**A. MAXIMUM RATING:**

- Electrostatic Sensitive Device
- 1. Input Power Level: 10 dBm
- 2. DC Voltage: 5V
- 3. Operating Temperature: -30°C to 65°C
- 4. Storage Temperature: -40°C to 85°C

**B. ELECTRICAL CHARACTERISTICS:**

(Operating temperature: 25°C)

<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>156.525</td>
<td>-</td>
</tr>
<tr>
<td>Minimum Insertion Loss (Fc ± 12.5kHz) IL</td>
<td>dB</td>
<td>-</td>
<td>2.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Passband Ripple (Fc ± 12.5kHz)</td>
<td>dB</td>
<td>-</td>
<td>0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Group delay ripple (Fc ± 12.5kHz) GD</td>
<td>μs</td>
<td>-</td>
<td>0.3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Attenuation: (Reference level from Min IL)

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>dB</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fc -10 ~ Fc -2MHz</td>
<td>50</td>
<td>60</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc -2 ~ Fc -1MHz</td>
<td>50</td>
<td>60</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc -1 ~ Fc -0.35MHz</td>
<td>40</td>
<td>57</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc -0.35 ~ Fc -0.1MHz</td>
<td>8</td>
<td>20</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc +0.1 ~ Fc +0.35MHz</td>
<td>8</td>
<td>24</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc +0.35 ~ Fc +1MHz</td>
<td>40</td>
<td>57</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc +1 ~ Fc +2MHz</td>
<td>50</td>
<td>57</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc +2 ~ Fc +10MHz</td>
<td>40</td>
<td>47</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. Narrow band Response:

![Graph showing S11 Log Mag and S21 Log Mag with frequency characteristics.](image)

2. Pass Band Response and Group Delay Response:

![Graph showing S11 Log Mag and S21 Log Mag with frequency characteristics.](image)
SAW Filter 156.5250MHz
Part No: MP07387
Model: TB1198A
Rev No: 1

3. Smith Chart:

4. Wide band Response:
D. MEASUREMENT CIRCUIT:

50Ohm Test circuit (single-ended / single-ended)

HP Network analyzer

![Circuit Diagram]

E. OUTLINE DRAWING:

![Outline Drawing]

9: Input
10: Input Ground
4: Output
5: Output Ground
1, 2, 3, 6, 7, 8: Ground
Unit: mm

F. PCB FOOTPRINT:

![PCB Footprint]
G. PACKING:

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

2. Tape Dimension

Direction of Feed
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.