SAW Filter 403.50MHz

Part No: MP07250

Model: TA1376A

Rev No: 2

A. MAXIMUM RATING:

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

B. ELECTRICAL CHARACTERISTICS:

1. Terminating source impedance: Z_s = 50Ω
2. Terminating load impedance: Z_L = 200Ω

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Type.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency</td>
<td>MHz</td>
<td>402</td>
<td>403.5</td>
<td>405</td>
</tr>
<tr>
<td>Insertion Loss 402.7 ~ 404.3MHz</td>
<td>dB</td>
<td>-</td>
<td>2.4</td>
<td>2.8</td>
</tr>
<tr>
<td>VSWR S11/S22 402.7 ~ 404.3MHz</td>
<td>-</td>
<td>-</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Amplitude ripple 402.7 ~ 404.3MHz</td>
<td>dB</td>
<td>-</td>
<td>0.36</td>
<td>1.0</td>
</tr>
<tr>
<td>Attenuation (Reference level from 0dB)</td>
<td>dB</td>
<td>45</td>
<td>51</td>
<td>-</td>
</tr>
<tr>
<td>10.0 ~ 350.00MHz</td>
<td>dB</td>
<td>42</td>
<td>45</td>
<td>-</td>
</tr>
<tr>
<td>350.00 ~ 392.00MHz</td>
<td>dB</td>
<td>25</td>
<td>28</td>
<td>-</td>
</tr>
<tr>
<td>416.00 ~ 430.00MHz</td>
<td>dB</td>
<td>50</td>
<td>58</td>
<td>-</td>
</tr>
<tr>
<td>430.00 ~ 650.00MHz</td>
<td>dB</td>
<td>42</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>650.00 ~ 1000.00MHz</td>
<td>dB</td>
<td>SMD 2.5x2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Package size</td>
<td>mm</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Temperature Coefficient of Frequency</td>
<td>ppm/°C</td>
<td>-36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. S21 Pass-band response: (span 10MHz)

![Diagram 1](image1)

2. S21 response: (span 50MHz)

![Diagram 2](image2)
3. S21 response: (span 1GHz)

4. S11&S22 VSWR
D. MEASUREMENT CIRCUIT:

\[ Z_{in} = 50 \, \text{ohm} \]
\[ Z_{out} = 200 \, \text{ohm} \]
\[ L_1 = 150 \, \text{nH} \]

E. OUTLINE DRAWING:

*All tolerances are ± 0.10um

4: RF input
1, 6: RF balanced output
5, 2, 3: Ground
F. PACKING:

1. Reel Dimension

(Please refer to FR-75D10 for packing quantity)
There shall be a trailer of 1000mm minimum of empty carrier tape sealed with cover tape.
There shall be a leader of 160mm minimum of empty carrier tape sealed with cover tape.

2. Tape Dimension

Section A-A
G. 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 245 ~ 260°C peak (min. 10 sec).
4. Time: 2 times.

![Pb Free IR Reflow Profile Diagram]