SAW Filter 184.320MHz
Part No: MP05166

A. MAXIMUM RATING:

1. Operating temperature range: -30°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 15dBm
4. Maximum DC Voltage: 10V

Electrostatic Sensitive Device

B. CHARACTERISTICS:

Ambient 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>184.32</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss IL</td>
<td>dB</td>
<td>-</td>
<td>5.2</td>
<td>8.0</td>
</tr>
<tr>
<td>-1dB bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>4.4</td>
<td>-</td>
</tr>
<tr>
<td>VSWR Fc ± 1.5MHz</td>
<td>MHz</td>
<td>-</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Passband Ripple Fc ± 2.5MHz</td>
<td>dB</td>
<td>-</td>
<td>1.6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Attenuation: (Reference level from Min IL)

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10MHz ~ 176.82MHz</td>
<td>dB</td>
<td>30</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>191.82MHz ~ 284.32MHz</td>
<td>dB</td>
<td>30</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Temperature Coefficient</td>
<td>ppm/°C</td>
<td>-</td>
<td>-18</td>
<td>-</td>
</tr>
<tr>
<td>Source Impedance</td>
<td>Ohm</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>Ohm</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Electrical characteristics shall be calculated with ideal capacitor and inductor.
C. FREQUENCY CHARACTERISTICS:

1. Wide band Response: (span 100MHz)

2. Pass band Response and Group Time Delay Response:

Fig. 1. Horizontal: 10MHz / Div, Vertical: 10Db / Div

Fig. 2. Horizontal: 1MHz / Div, Vertical: 1dB / Div, Vertical: 50ns / Div
SAW Filter 184.320MHz
Part No: MP05166

Model: TB0995A
Rev No: 1

D. MATCHING CIRCUIT:

\[ L_{s2} = 125\text{nH} \quad L_{s3} = 110\text{nH} \quad C_{p1} = 27\text{pF} \quad C_{p4} = 24\text{pF} \]

E. OUTLINE DRAWING:

A: Input
E: Output
B, C, D, F, G, H: Ground
Unit: mm

F. PCB FOOTPRINT:
G. PACKING:

1. Reel Dimension

2. Tape Dimension
H. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile with temperature (°C) on the y-axis and time (Sec) on the x-axis. The graph peaks at approximately 300°C after about 100 seconds, then cools down gradually.]