SAW Filter 55.0MHz

Part No: MP04109

Mode : TB0887A

Rev No:1

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

B. Characteristics:
1. Ambient Temperature: 25°C

<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, Fc</td>
<td>MHz</td>
<td>-</td>
<td>5.5</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss, IL</td>
<td>dB</td>
<td>-</td>
<td>15.4</td>
<td>17</td>
</tr>
<tr>
<td>-1.5dB bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>-40dB bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>1.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Passband Ripple Fc+/-40KHz</td>
<td>MHz</td>
<td>-</td>
<td>0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Group Delay Variation Fc+/-10KHz</td>
<td>nsec</td>
<td>-</td>
<td>120</td>
<td>170</td>
</tr>
<tr>
<td>Absolute Delay</td>
<td>usec</td>
<td>-</td>
<td>1.5</td>
<td>2.2</td>
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<tr>
<td>Temp. Coefficient</td>
<td>ppm/°C²</td>
<td>-</td>
<td>-0.036</td>
<td>-</td>
</tr>
<tr>
<td>Source Impedance</td>
<td>Ohm</td>
<td>-</td>
<td>5.1</td>
<td>-</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>Ohm</td>
<td>-</td>
<td>5.1</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

(1) Wide band Response: (span 50MHz)

![Wide band Response Graph]

(2) Pass band Response and Group Time Delay response:

![Pass band Response Graph]
D. MATCHING CIRCUIT:

![Circuit Diagram]

\[ L_{s2} = 470nH + 680nH \quad L_{s3} = 380nH + 470nH \quad C_p1 = 56pF \quad C_p4 = 47pF \]

E. OUTLINE DRAWING:

![Outline Drawing]

#K : Input
#L : Input Ground
#E : Output
#F : Output Ground
#A,B,C,D,G,H,I,J : Ground
F. PCB FOOTPRINT:
G. PACKING:
1. REEL DIMENSION

2. TAPE DIMENSION