SAW Filter 175.0750MHz
Part No: MP07586
Model: TB1210A
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device

1. Operating temperature range: -10°C to 75°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 10dBm
4. Maximum DC Voltage: 10V

B. ELECTRONIC 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>175.075</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss IL at 25°C</td>
<td>dB</td>
<td>-</td>
<td>2.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Insertion Loss IL at -10°C to 75°C</td>
<td>dB</td>
<td>-</td>
<td>2.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Passband Ripple Fc ± 7.5kHz at -10°C to 75°C</td>
<td>dB</td>
<td>-</td>
<td>0.2</td>
<td>±0.7</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>Fc ± 1MHz</td>
<td>dB</td>
<td>55</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>Fc ± 100kHz at 25°C</td>
<td>dB</td>
<td>10</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Fc ± 100kHz at -10°C to 75°C</td>
<td>dB</td>
<td>7</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Temperature 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>50</td>
<td>-</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>Ohm</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. Wide band Response

2. Pass Band Response and Group Time Delay Response:
3. Smith Chart:
SAW Filter 175.0750MHz  Model: TB1210A  Part No: MP07586
Rev No: 1

D. OUTLINE DRAWING:

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

E. MATCHING CIRCUIT:

L1 = 180nH, L2 = 180nH, C1 = 1pF, C2 = 1pF

F. PCB FOOTPRINT:
G. PACKING:

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

2. Tape Dimension

SECTION A-A

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