SAW Filter 309.0MHz
Part No: MP05533
Rev No: 1

A. MAXIMUM RATING:

   Electrostatic Sensitive Device

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

B. ELECTRICAL 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>309</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (304.225 ~ 314.285MHz) IL</td>
<td>dB</td>
<td>-</td>
<td>1.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Amplitude Ripple (304.225 ~ 314.285MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.8</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Attenuation (Reference level from 0dB)

<table>
<thead>
<tr>
<th></th>
<th>dB</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 ~ 280MHz</td>
<td>40</td>
<td>45</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>350 ~ 700MHz</td>
<td>30</td>
<td>34</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Temperature coefficient of frequency</td>
<td>ppm/k</td>
<td>-</td>
<td>-36</td>
<td>-</td>
</tr>
</tbody>
</table>

C. MEASUREMENT CIRCUIT:

HP Network analyzer

![Diagram of measurement circuit]
D. OUTLINE DRAWING:

#2 : Input  
#6 : Output  
#4, 8 : Case Ground  
#1, 3, 5, 7 : Ground

E. PCB FOOTPRINT:
F. FREQUENCY CHARACTERISTICS:

![Diagram](image1.png)

![Diagram](image2.png)
G. PACKING:

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

2. Tape Dimension
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 250±10°C peak (max. 10sec).
4. Time: 2 times.