SAW Filter 408.0MHz
Part No: MP05392

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm
2. DC Voltage: 3V
3. Operating Temperature: +15°C to +35°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>408</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (405.5 ~ 410.5MHz) IL</td>
<td>dB</td>
<td>-</td>
<td>2.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Amplitude Ripple (405.5 ~ 410.5MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.8</td>
<td>2.1</td>
</tr>
<tr>
<td>VSWR (405.5 ~ 410.5MHz)</td>
<td>-</td>
<td>-</td>
<td>1.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Attenuation (Reference level from 0dB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 ~ 371MHz</td>
<td>dB</td>
<td>40</td>
<td>62</td>
<td>-</td>
</tr>
<tr>
<td>371 ~ 386MHz</td>
<td>dB</td>
<td>31</td>
<td>66</td>
<td>-</td>
</tr>
<tr>
<td>386 ~ 397.5MHz</td>
<td>dB</td>
<td>10</td>
<td>48</td>
<td>-</td>
</tr>
<tr>
<td>434 ~ 461MHz</td>
<td>dB</td>
<td>37</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>461 ~ 542MHz</td>
<td>dB</td>
<td>40</td>
<td>64</td>
<td>-</td>
</tr>
</tbody>
</table>

C. MEASUREMENT CIRCUIT:

HP Network analyzer

```
50Ω  2  SAW Filter  6  50Ω
     1, 3, 4, 5, 7, 8
```
D. OUTLINE DRAWING:

![Outline Drawing Image]

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

E. PCB FOOTPRINT:

![PCB Footprint Image]
F. FREQUENCY CHARACTERISTICS:

- Bandwidth: 30 MHz
- Spurious-Free Dynamic Range: 
  - 3rd Harmonic: -90 dBc
  - 5th Harmonic: -100 dBc

Diagram showing frequency characteristics with specific points marked.
SAW Filter 408.0MHz
Model: TA1542A
Part No: MP05392
Rev No: 1

Reflection Functions

S11

S22
G. PACKING:

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

2. Tape Dimension

Direction of Feed
H. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile with temperature on the Y-axis and time on the X-axis.](image)