SAW Filter 1382.24MHz
Part No: MP01479

Model: TA0697A
Rev No: 2

A. MAXIMUM RATING:

1. Input Power Level: 10dBm
2. DC Voltage: 3V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -50°C to +95°C

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (differential) \( Z_S = 150\Omega // 30\text{nH} \)
Terminating load impedance (differential) \( Z_L = 150\Omega // 30\text{nH} \)

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency Fc</td>
<td>MHz</td>
<td>-</td>
<td>1382.24</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bandwidth at -2dB</td>
<td>MHz</td>
<td>40</td>
<td>52</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss in 1362.24 ~ 1402.24MHz</td>
<td>dB</td>
<td>-</td>
<td>2.2</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple (1362.24MHz ~ 1402.24MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.6</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Phase error (1362.24MHz ~ 1402.24 MHz)</td>
<td>deg</td>
<td>-</td>
<td>4.3</td>
<td>6.5</td>
<td>-</td>
</tr>
<tr>
<td>I/O VSWR (1362.24MHz ~ 1402.24MHz)</td>
<td>-</td>
<td>1.7</td>
<td>2.5</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

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<tr>
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<th>Typ.</th>
<th>Max.</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attenuation (1)</td>
<td>dB</td>
<td>46</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>50 ~ 1300.18MHz</td>
<td>dB</td>
<td>46</td>
<td>52</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1464.3 ~ 1810.5MHz</td>
<td>dB</td>
<td>35</td>
<td>40</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1810.5 ~ 4250MHz</td>
<td>dB</td>
<td>30</td>
<td>39</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4250 ~ 6000MHz</td>
<td>dB</td>
<td>30</td>
<td>39</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:

The amplitude reference is insertion loss at Fc.
The amplitude ripple is defined as the max. level - min. level over any 30MHz block of the given bandwidth.
The phase error is measured over any 30MHz block of the given bandwidth.
C. OUTLINE DRAWING:

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

D. MEASUREMENT CIRCUIT:

```
150Ω input
30nH
150Ω output
```

E. PCB FOOTPRINT:
F. FREQUENCY CHARACTERISTICS:

![Graph showing frequency characteristics with data points]

1. 1.3622400000 GHz -2.1761 dB
2. 1.4002400000 GHz -2.0453 dB

![Graph showing frequency characteristics with data points]

1. 1.3338400000 GHz -5.6892 dB
2. 1.4644000000 GHz -61.455 dB
3. 1.3822400000 GHz -2.0247 dB
Reflection Functions

S11

S22
G. PACKING:

1. Reel Dimension

(Reel Count: 7" = 1000; 13" = 3000)

2. Tape Dimension
H. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile with temperature (Deg C) on the y-axis and time (Sec) on the x-axis. The graph shows a peak around 250°C after 100 seconds and a cooling down phase.]