SAW Filter 441.0MHz

Part No: MP04029

Model: TA1084A
Rev No: 1

A. MAXIMUM RATING:

1. Input Power Level: 10dBm
2. DC voltage: 3V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -55°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

Reference temperature: 25°C

<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 $F_c$</td>
<td>MHz</td>
<td>-</td>
<td>441</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss $IL_{\text{min}}$ (reference level)</td>
<td>dB</td>
<td>-</td>
<td>1.5</td>
<td>2.8</td>
</tr>
<tr>
<td>2dB Bandwidth BW $-2dB$</td>
<td>MHz</td>
<td>15</td>
<td>22.3</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss $(433.5 \sim 448.5MHz)$</td>
<td>IL</td>
<td>-</td>
<td>2.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Absolute Attenuation: (Reference level from 0dB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F_c$ -45 to $F_c$ -100MHz</td>
<td>dB</td>
<td>40</td>
<td>56</td>
<td>-</td>
</tr>
<tr>
<td>$F_c$ +45 to $F_c$ +55MHz</td>
<td>dB</td>
<td>30</td>
<td>56</td>
<td>-</td>
</tr>
<tr>
<td>$F_c$ +55 to $F_c$ +100MHz</td>
<td>dB</td>
<td>40</td>
<td>54</td>
<td>-</td>
</tr>
<tr>
<td>Temperature coefficient of frequency</td>
<td>ppm/k</td>
<td>-</td>
<td>-36</td>
<td>-</td>
</tr>
<tr>
<td>Source impedance $Z_S$</td>
<td>Ω</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Load impedance $Z_L$</td>
<td>Ω</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: $IL_{\text{min}}$ is the minimum of the pass band attenuation. The center frequency $F_c$ is the mean value of the upper and lower frequencies at the 2dB filter attenuation level relative to the IL min.
C. FREQUENCY CHARACTERISTICS:

[Graph of frequency characteristics with annotations]

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Golledge Electronics Ltd
Eaglewood Park, ILMINSTER
Somerset, TA19 9DQ, UK

Tel: +44 1460 256 100
Fax: +44 1460 256 101
www.golledge.com
D. MEASUREMENT CIRCUIT:

HP Network analyzer

```
<table>
<thead>
<tr>
<th>50Ω</th>
<th>2</th>
<th>SAW Filter</th>
<th>6</th>
<th>50Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 3, 4, 5, 7, 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

E. OUTLINE DRAWING:

#2: Input  
#6: Output  
#1, 3, 4, 5, 7, 8: Ground  
Unit: mm
F. PCB FOOTPRINT:
G. PACKING:

1. Reel Dimension

2. Tape Dimension

Direction of Feed