SAW Filter 495.0MHz  Model: TB0707A
Part No: MP03884  REV NO: PROVISIONAL A

A. MAXIMUM RATING:

1. Operating Temperature: -25°C to +70°C
2. Storage Temperature: -40°C to +85°C
3. Maximum Input Power: 10dBm

B. ELECTRICAL CHARACTERISTICS:

Ambient 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 Fc</td>
<td>MHz</td>
<td>-</td>
<td>495</td>
<td>-</td>
</tr>
<tr>
<td>Insertion loss at Fc</td>
<td>dB</td>
<td>-</td>
<td>14.7</td>
<td>18</td>
</tr>
<tr>
<td>Bandwidth at -1.0dB</td>
<td>MHz</td>
<td>30.0</td>
<td>33.0</td>
<td>-</td>
</tr>
<tr>
<td>Bandwidth at -6.0dB</td>
<td>MHz</td>
<td>-</td>
<td>39.0</td>
<td>42.0</td>
</tr>
<tr>
<td>Bandwidth at -25.0dB</td>
<td>MHz</td>
<td>-</td>
<td>46.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Amplitude Ripple (Fc ± 15MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.4</td>
<td>1</td>
</tr>
<tr>
<td>Group Delay Ripple (Fc ± 15MHz)</td>
<td>nS</td>
<td>-</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>Absolute Group delay at Fc</td>
<td>nS</td>
<td>-</td>
<td>310</td>
<td>-</td>
</tr>
<tr>
<td>Temp Coefficient</td>
<td>ppm/°C</td>
<td>-</td>
<td>-0.18</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. S21 Response: (span: 400MHz)

![Graph showing S21 Response](image)

2. S21 Response: (span: 50MHz)

![Graph showing S21 Response](image)
3. S11 Smith-Chart: (span: 400MHz)

4. S22 Smith-Chart: (span: 400MHz)
SAW Filter 495.0MHz  
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D. MEASUREMENT CIRCUIT:

1. Single ended input 50 ohm to Single ended Output 50Ω

$$\begin{align*}
\text{C1} &= 10.5\text{pF}, \text{L1} = 5.6\text{nH}, \text{C2} = 10\text{pF}, \text{L2} = 5.6\text{nH}
\end{align*}$$

E. OUTLINE DRAWING:

F. PCB FOOTPRINT:
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION
SAW Filter 495.0MHz
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H. RECOMMENDED REFLOW PROFILE:

[Graph showing recommended reflow profile with temperature (Deg C) on the y-axis and time (Sec) on the x-axis.]