SAW Filter 350.0MHz  
Part No: MP03633  

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>350</td>
<td>-</td>
</tr>
<tr>
<td>Insertion loss at Fc</td>
<td>dB</td>
<td>-</td>
<td>14.6</td>
<td>18</td>
</tr>
<tr>
<td>Bandwidth at -1.5dB</td>
<td>MHz</td>
<td>31.0</td>
<td>35.1</td>
<td>-</td>
</tr>
<tr>
<td>Bandwidth at -6.0dB</td>
<td>MHz</td>
<td>-</td>
<td>41.4</td>
<td>43.0</td>
</tr>
<tr>
<td>Bandwidth at -25.0dB</td>
<td>MHz</td>
<td>-</td>
<td>48.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Amplitude Ripple (Fc ± 15.0MHz)</td>
<td>dB</td>
<td>-</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Group Delay Ripple (Fc ± 15.0MHz)</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>320</td>
<td>-</td>
</tr>
<tr>
<td>Temp Coefficient</td>
<td>ppm/°C</td>
<td>-</td>
<td>-18</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. S21 wide-band Response: (span 400MHz)

![Fig. 1. Horizontal: 40MHz/Div, Vertical: 10dB/Div](image)

2. S21 pass-band Response: (span 60MHz)

![Fig. 2. Horizontal: 6MHz/Div, Vertical: 1dB/Div](image)
3. S11 Smith-Chart: (span 400MHz)

![S11 Smith-Chart](image)

4. S22 Smith-Chart: (span 400MHz)

![S22 Smith-Chart](image)
D. MEASUREMENT CIRCUIT:

Single ended input 50Ω to Single ended Output 50Ω

\[
\begin{align*}
C_1 &= 30\text{pF}, L_1 = 6.8\text{nH}, C_2 = 10\text{pF}, L_2 = 5.6\text{nH}
\end{align*}
\]

E. OUTLINE DRAWING:

Pin A: RF Input
Pin E: RF Output
Pin B, C, D, F, G, H: Ground
Unit: mm

F. PCB FOOTPRINT:
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION
H. RECOMMENDED REFLOW PROFILE:

![Reflow Profile Graph]

- Time (Sec) from 0 to 360
- Temperature (Deg C) from 20 to 280

The graph shows the recommended reflow profile for the SAW Filter 350.0MHz Model: TB0706A Part No: MP03633 Rev No: 1.