SAW Filter 120.0MHz Model: TB0763A
Part No: MP03441 Rev No: 1

A. MAXIMUM RATING:

1. Operating Temperature: -20°C ~ +80°C
2. Storage Temperature: -40°C ~ +85°C
3. Input power: 10dBm

B. CHARACTERISTICS:

Ambient Temperature: 25°C

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc MHz</td>
<td>120.0</td>
<td></td>
</tr>
<tr>
<td>Minimum Insertion loss IL dB</td>
<td>17.0</td>
<td>20.0</td>
</tr>
<tr>
<td>1.5dB BW MHz</td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td>Rejection at Fc ± 13MHz MHz</td>
<td>40.0</td>
<td>46.0</td>
</tr>
<tr>
<td>Passband Ripple Fc ± 7.5MHz dB</td>
<td>0.85</td>
<td>1.0</td>
</tr>
<tr>
<td>Group-Delay Ripple Fc ± 7.5MHz nsec</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>Phase Linearity Fc ± 7.5MHz p-p deg</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Rejection 10 ~ 100MHz dB c</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>140 ~ 180MHz dB c</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>Temp Coefficient ppm/K</td>
<td>-</td>
<td>-94</td>
</tr>
</tbody>
</table>

Matching:

1. The input of the filter will be matched to 50Ω
2. The output of the filter will be matched to 50Ω
C. FREQUENCY CHARACTERISTICS:

1. S21 Response: (span: 100MHz)

![S21 Response Graph]

Fig. 1. Horizontal: 10MHz/Div, Vertical: 10dB/Div

2. Group - Delay Ripple: (span: 30MHz)

![Group Delay Ripple Graph]

Fig. 2. Horizontal: 3MHz/Div, Vertical: 100ns
3. S11 Smith Chart: (span: 100MHz)

![S11 Smith Chart](image1)

4. S22 Smith Chart (span: 100MHz)

![S22 Smith Chart](image2)
D. MEASUREMENT CIRCUIT:

Matching Circuit

SAW Filter

K: RF input
E: RF output
A, B, C, D, G, H, I, L, F, J: To be Ground

Unit: mm (week01, 02, 03, 52 = >A, B, C z)

E. OUTLINE DRAWING:

F. PCB FOOTPRINT:
G. PACKING:

1. REEL DIMENSION

![Reel Dimension Diagram]

2. TAPE DIMENSION

![Tape Dimension Diagram]
H. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile with temperature and time axes.]