A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 10dBm
4. Maximum DC Voltage: 10V

B. CHARACTERISTICS:

<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>77.5</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss IL</td>
<td>dB</td>
<td>-</td>
<td>11.2</td>
<td>12.5</td>
</tr>
<tr>
<td>-1dB bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>1.13</td>
<td>-</td>
</tr>
<tr>
<td>-3dB bandwidth</td>
<td>MHz</td>
<td>1.0</td>
<td>1.4</td>
<td>-</td>
</tr>
<tr>
<td>-40dB bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>2.48</td>
<td>2.65</td>
</tr>
<tr>
<td>Passband Ripple Fc ± 0.3MHz</td>
<td>dB</td>
<td>-</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Group Delay variation Fc ± 0.3MHz</td>
<td>nsec</td>
<td>-</td>
<td>350</td>
<td>400</td>
</tr>
<tr>
<td>Absolute Delay</td>
<td>nsec</td>
<td>-</td>
<td>0.9</td>
<td>-</td>
</tr>
<tr>
<td>Temperature Coefficient</td>
<td>ppm/°C2</td>
<td>-</td>
<td>-0.036</td>
<td>-</td>
</tr>
<tr>
<td>Source Impedance</td>
<td>Ohm</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Load Impedance</td>
<td>Ohm</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. Wide band Response: (span 10MHz)

![Wide band Response Graph]

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

2. Pass band Response and Group Time Delay response:

![Pass band Response and Group Time Delay Graph]

Fig. 2. Horizontal: 4MHz / Div, Vertical: 1dB / Div, Vertical: 100ns / Div
3. Wide band Response:

Fig. 3. Horizontal: 40MHz / Div, Vertical: 1dB / Div

4. Smith Chart:
D. MATCHING CIRCUIT:

L1 = 430nH, C1 = C2 = 82 pF, L2 = 390nH

E. OUTLINE DRAWING:

A: RF input
B: RF input ground
G: RF output
H: RF output ground
C, D, E, F, J, K, M, N: Ground
Unit: mm
F. PCB FOOTPRINT:
G. PACKING:

1. Reel Dimension

![Reel Dimension Diagram]

Unit: mm

2. Tape Dimension

![Tape Dimension Diagram]

Unit: mm
H. RECOMMENDED REFLOW PROFILE:

![Reflow Profile Graph]

**SAW Filter 77.50MHz**

**Model: TB0885A**

**Part No: MP05073**

**Rev No: 1**