SAW Filter 590MHz  
Part No: MP01224  
Model: TB0288A  
Rev No: 1

A. MAXIMUM RATING:

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

B. CHARACTERISTICS:

Ambient Temperature: 25°C

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc</td>
<td>MHz</td>
<td>-</td>
<td>590</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Minimum Insertion Loss, IL</td>
<td>dB</td>
<td>-</td>
<td>11.0</td>
<td>12.0</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple within Fc ± 0.12MHz</td>
<td>MHz</td>
<td>-</td>
<td>0.3</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>1dB Bandwidth</td>
<td>MHz</td>
<td>0.39</td>
<td>0.77</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>40dB Bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>3.58</td>
<td>4.00</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation: (Reference level from Min IL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500MHz ~ 587.7MHz</td>
<td>dB</td>
<td>40</td>
<td>55</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>592.3MHz ~ 600MHz</td>
<td>dB</td>
<td>40</td>
<td>43</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

C. OUTLINE DRAWING:

L: Input or Balanced Input  
M: Input ground or Balanced Input return  
E: Output or Balanced Output  
F: Output ground or Balanced Output return  
A, B, C, D, G, H, J, K: To be grounded  
Unit: mm
D. FREQUENCY CHARACTERISTICS:

1. S21 Response

![S21 Response Graph]

Horizontal: 2MHz/Div, Vertical: 10dB/Div

2. Pass band Ripple and Group Delay Ripple

![Pass Band Ripple and Group Delay Ripple Graph]

Horizontal: 0.3MHz/Div, Vertical: 1dB/Div
E. TEST FIXTURE:

![Test Fixture Diagram]

- **C1 = 4 pF**
- **C2 = 5 pF**

F. PCB FOOTPRINT:

![PCB Footprint Diagram]
G. PACKING:

1. REEL DIMENSION

[Diagram showing reel dimensions]

2. TAPE DIMENSION

[Diagram showing tape dimensions]