SAW Filter 300MHz
Part No: MP02017

A. MAXIMUM RATING:

1. Input Power Level: 13dBm
2. DC Voltage: 5V
3. Operating Temperature: -20°C to +80°C
4. Storage Temperature: -30°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

<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>300</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Min. Insertion loss IL</td>
<td>dB</td>
<td>-</td>
<td>3.8</td>
<td>6.5</td>
<td>-</td>
</tr>
<tr>
<td>Passband Ripple (Fc ± 35kHz)</td>
<td>dB</td>
<td>-</td>
<td>0.4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Bandwidth @ 3dB</td>
<td>kHz</td>
<td>200</td>
<td>230</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group delay ripple (299.965 ~ 300.035MHz)</td>
<td>µs</td>
<td>-</td>
<td>0.5</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (relative to IL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fc ± 400kHz</td>
<td>dB</td>
<td>15</td>
<td>43</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fc ± 400kHz ~ Fc ± 600kHz</td>
<td>dB</td>
<td>27</td>
<td>43</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fc ± 600kHz ~ Fc ± 13MHz</td>
<td>dB</td>
<td>35</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fc ± 100MHz</td>
<td>dB</td>
<td>50</td>
<td>55</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Temperature coefficient of frequency TCf</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.033ppm/C^2</td>
</tr>
</tbody>
</table>

C. OUTLINE DRAWING:
D. MEASUREMENT CIRCUIT:

50Ω Test circuit (single-ended / single-ended)

![Circuit Diagram]

E. PCB FOOTPRINT:
F. FREQUENCY CHARACTERISTICS:

![Graph 1](image1)

**FREQUENCY CHARACTERISTICS:**

- **Center Frequency:** 300 MHz
- **IPBW:** 2 kHz
- **Span:** 400 kHz

![Graph 2](image2)

**Delay Characteristics:**

- **Center Frequency:** 300 MHz
- **Delay Values:**
  - Channel 1: 2.76 μs
  - Channel 2: 3.6243 μs

**Model:** TB0677A
**Part No:** MP02017
**Rev No:** 1
SAW Filter 300MHz
Part No: MP02017

Model: TB0677A
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TB0677A v1
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION

Direction of Feed
H. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile with temperature in degrees Celsius on the y-axis and time in seconds on the x-axis.](image)

- Temperature range: 20°C to 280°C
- Time range: 0 seconds to 360 seconds

The graph illustrates the recommended reflow profile for the SAW Filter 300MHz Model: TB0677A Part No: MP02017 Rev No: 1.