SAW Filter 300MHz
Part No: MP01606

A. MAXIMUM RATING:

1. Input Power Level: 20dBm
2. DC Voltage: 5V
3. Operating Temperature: 0°C to +80°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Type.</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 (Fc ± 50kHz) ILc</td>
<td>dB</td>
<td>-</td>
<td>3.7</td>
<td>7.0</td>
<td>-</td>
</tr>
<tr>
<td>Passband Ripple (Fc ± 50kHz)</td>
<td>dB</td>
<td>-</td>
<td>0.4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Return Loss (Fc ± 50kHz) RL</td>
<td>dB</td>
<td>9.4</td>
<td>13.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (relative to ILc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fc -25 to Fc -1-1.6MHz</td>
<td>dB</td>
<td>50</td>
<td>62</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fc -1.6 to Fc -0.6MHz</td>
<td>dB</td>
<td>28</td>
<td>62</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fc +0.6 to Fc +1.6MHz</td>
<td>dB</td>
<td>28</td>
<td>53</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fc +1.6 to Fc +25MHz</td>
<td>dB</td>
<td>50</td>
<td>57</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Temperature coefficient of frequency TCf</td>
<td></td>
<td></td>
<td></td>
<td>-0.033 ppm / C^2</td>
<td></td>
</tr>
</tbody>
</table>
C. OUTLINE DRAWING:

![Outline Drawing](image)

9: Input  
4: Output  
10: Balance input or input ground  
5: Balance output or output ground  
1, 2, 3, 6, 7, 8: To be grounded  
Unit: mm

D. MEASUREMENT CIRCUIT:

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

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HP Network analyzer
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IN  L1=100nH  SAW Filter  L1=100nH  OUT
50Ω  9  4  5
10  1, 2, 3, 6, 7, 8

E. PCB FOOTPRINT:

![PCB Footprint](image)
F. FREQUENCY CHARACTERISTICS:
Reflection Functions
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION
H. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile with temperatures in degrees Celsius over time in seconds.]