SAW Filter 978.0MHz
Model: TA1381A
Part No: MP07881
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm
2. DC Voltage: 3V
3. Operating Temperature: 0°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

1. Terminating source impedance (differential): \( Z_S = 50\Omega \)
2. Terminating load impedance (differential): \( Z_L = 50\Omega \)

<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>978</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (965.5 ~ 990.5MHz)</td>
<td>dB</td>
<td>-</td>
<td>2.6</td>
<td>3.5</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple (965.5 ~ 990.5MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.7</td>
<td>1.5</td>
<td>-</td>
</tr>
<tr>
<td>VSWR (965.5 ~ 990.5MHz)</td>
<td></td>
<td></td>
<td>1.8</td>
<td>2.3</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (reference level from 0dB)</td>
<td>dB</td>
<td>45</td>
<td>48</td>
<td>-</td>
<td>-</td>
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<tr>
<td>200 ~ 600MHz</td>
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<tr>
<td>600 ~ 850MHz</td>
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<tr>
<td>850 ~ 920MHz</td>
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<tr>
<td>1040 ~ 1100MHz</td>
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<tr>
<td>1100 ~ 1250MHz</td>
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<tr>
<td>1250 ~ 1800MHz</td>
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<tr>
<td>Temperature Coefficient of Frequency</td>
<td>ppm/°C</td>
<td></td>
<td></td>
<td>-36</td>
<td>-</td>
</tr>
</tbody>
</table>
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C. OUTLINE DRAWING:

1, 2: Balanced Input  
5, 6: Balanced Output  
3, 4, 7, 8: Ground  
Unit: mm

D. MEASUREMENT CIRCUIT:

Balance impedance 6Ω ohm

E. PCB FOOTPRINT:
F. FREQUENCY CHARACTERISTICS:
Reflection Functions

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G. PACKING:

1. Reel Dimension

2. Tape Dimension
H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 245 ~ 260°C peak (min. 10 sec).
4. Time: 2 times.