A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

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

B. ELECTRICAL CHARACTERISTICS:

1. Terminating source impedance (single ended): \( Z_s = 50\Omega \)
2. Terminating load impedance (single ended): \( Z_L = 50\Omega \)

<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 ( F_c ) MHz</td>
<td>MHz</td>
<td>-</td>
<td>1059</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (1051 ~ 1067MHz) dB</td>
<td>dB</td>
<td>-</td>
<td>1.7</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude Variation (1051 ~ 1067MHz)dB</td>
<td>dB</td>
<td>-</td>
<td>0.65</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude Variation over 3MHz dB</td>
<td>dB</td>
<td>-</td>
<td>0.5</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>VSWR (1051 ~ 1067MHz)</td>
<td>-</td>
<td>1.7</td>
<td>2.4</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Group Delay Variation over 3MHz ns</td>
<td>ns</td>
<td>-</td>
<td>7</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (reference level from 0dB)</td>
<td>dB</td>
<td>30</td>
<td>35.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DC ~ 1030MHz</td>
<td>dB</td>
<td>15</td>
<td>24</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1030 ~ 1034MHz</td>
<td>dB</td>
<td>15</td>
<td>37</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1084 ~ 1088MHz</td>
<td>dB</td>
<td>15</td>
<td>37</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1088 ~ 2000MHz</td>
<td>dB</td>
<td>30</td>
<td>37</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Temperature Coefficient of Frequency</td>
<td>ppm/°C</td>
<td>-</td>
<td>-36</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
C. OUTLINE DRAWING:

[Diagram of the outline drawing with labels 1 to 6, and dimensions provided.]

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

D. MEASUREMENT CIRCUIT:

HP Network analyzer

50Ω 2 SAW Filter 5 50Ω

1, 3, 4, 6

E. PCB FOOTPRINT:

[Diagram of the PCB footprint with dimensions provided.]
F. FREQUENCY CHARACTERISTICS:

[Graphs showing frequency characteristics]

SAW Filter 1059.0MHz
Part No: MP03792
Model: TA1412A
Rev No 1
Reflection Functions

S11

S22
G. PACKING:

1. Reel Dimension

![Reel Dimension Diagram]

2. Tape Dimension

![Tape Dimension Diagram]
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 10sec).
4. Time: 2 times.