A. MAXIMUM RATING:

- Electrostatic Sensitive Device (ESD)
- 1. Input Power Level: 10dBm
- 2. DC Voltage: 3V
- 3. Operating Temperature: -20°C to +70°C
- 4. Storage Temperature: -30°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>1530</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (1512.5 ~ 1547.5MHz) IL</td>
<td>dB</td>
<td>-</td>
<td>2.1</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude Ripple (1512.5 ~ 1547.5MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.4</td>
<td>1.5</td>
<td>-</td>
</tr>
<tr>
<td>VSWR (1512.5 ~ 1547.5MHz)</td>
<td></td>
<td>1.8</td>
<td>2.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (reference level from 0dB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1275 ~ 1305MHz</td>
<td>dB</td>
<td>40</td>
<td>44</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1478MHz</td>
<td>dB</td>
<td>20</td>
<td>23</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1800 ~ 1900MHz</td>
<td>dB</td>
<td>40</td>
<td>45</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Temperature Coefficient of Frequency ppm/°C</td>
<td></td>
<td>-</td>
<td>-36</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
C. OUTLINE DRAWING:

D. MEASUREMENT CIRCUIT:

HP Network analyzer

50Ω 2 50Ω
SAW Filter
1, 3, 4, 6

E. PCB FOOTPRINT:
SAW Filter 1530.0MHz
Part No: MP05092

Model: TA1541A
Rev No: 1

F. FREQUENCY CHARACTERISTICS:

[Graphs showing frequency characteristics for SAW Filter 1530.0MHz]
Reflection Functions

S11

S22
G. PACKING:

1. Reel Dimension

(Please refer to FR-75D10 for packing quantity)

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.