SAW Filter: 1575.42MHz
Model: TA1425A
Part No: MP05506
Rev No: 2

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: \( Z_s = 50\Omega \)
2. Terminating load impedance: \( Z_L = 50\Omega \)

<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 )</td>
<td>MHz</td>
<td>-</td>
<td>1575.42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Max. Insertion Loss ( 1574.42 \sim 1576.42MHz ) IL</td>
<td>dB</td>
<td>-</td>
<td>0.8</td>
<td>1.2</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple ( 1574.42 \sim 1576.42MHz )</td>
<td>dB</td>
<td>-</td>
<td>0.1</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>VSWR ( 1574.42 \sim 1576.42MHz )</td>
<td>-</td>
<td>1.1</td>
<td>1.6</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>0.1 \sim 894MHz</td>
<td>dB</td>
<td>16</td>
<td>30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>894 \sim 1500MHz</td>
<td>dB</td>
<td>15</td>
<td>29</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1650 \sim 4000MHz</td>
<td>dB</td>
<td>17</td>
<td>30</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4000 \sim 6000MHz</td>
<td>dB</td>
<td>15</td>
<td>38</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:

- **top view**
  - C: Input
  - A, B, D, E: Ground
  - Unit: mm

- **bottom view**
  - C: Input
  - A: Output
  - B, D, E: Ground
  - Unit: mm

D. MEASUREMENT CIRCUIT:

- 50Ω

E. PCB FOOTPRINT:

- Land Pattern
- Unit: mm
F. FREQUENCY CHARACTERISTICS:

![Graph 1: Freq 1575.42MHz SAW Filter -856.42dB](image1)

![Graph 2: Freq 1575.42GHz SAW Filter -856.42dB](image2)

![Graph 3: Freq 1575.42GHz SAW Filter -856.42dB](image3)
Reflection Functions

**S11**

**S22**
G. PACKING:

1. Reel Dimension

2. Tape Dimension

---

TA1425A v2
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.