A. MAXIMUM RATING:

Electronic Sensitive Device (ESD)

1. Input Power Level: 20dBm
2. DC Voltage: 7.5 V
3. Operating Temperature: -10°C to +60°C
4. Storage Temperature: -20°C to +70°C

B. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc</td>
<td>MHz</td>
<td>-</td>
<td>422.2</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (421.575 ~ 422.3MHz) IL</td>
<td>dB</td>
<td>-</td>
<td>1.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Amplitude Ripple (421.575 ~ 422.3MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Attenuation (Reference level from 0dB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400.8MHz</td>
<td>dB</td>
<td>45</td>
<td>78</td>
<td>-</td>
</tr>
<tr>
<td>443.6MHz</td>
<td>dB</td>
<td>35</td>
<td>48</td>
<td>-</td>
</tr>
<tr>
<td>Temperature Coefficient of Frequency</td>
<td>ppm/°C</td>
<td>-</td>
<td>-36</td>
<td>-</td>
</tr>
</tbody>
</table>

C. MEASUREMENT CIRCUIT:

HP Network analyzer

![SAW Filter Measurement Circuit Diagram](attachment:image.png)
**D. OUTLINE DRAWING:**

B: Input  
E: Output  
A, C, D, F: Ground  
Unit: mm

**E. PCB FOOTPRINT:**

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__SAW Filter 422.20MHz__  
**Model:** TA1603A  
**Part No:** MP06788  
**Rev No:** 1

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F. FREQUENCY CHARACTERISTICS:

- **Frequency Characteristics 1:**
  - Start frequency: 421.575 MHz
  - Stop frequency: 422.000 MHz
  - A gain at 421.575 MHz: -1.6529 dB
  - Gain at 422.000 MHz: -1.6005 dB

- **Frequency Characteristics 2:**
  - Start frequency: 400.000 MHz
  - Stop frequency: 443.000 MHz
  - Gain at 400.000 MHz: -72.385 dB
  - Gain at 443.000 MHz: -45.564 dB
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 250 ± 10°C peak (max. 10 sec).
4. Time: 2 times.