SAW Filter 420.0MHz  Model: TA0409A  
Part No: MA06702  Rev No: 1

A. MAXIMUM RATING:

1. Input Power Level: 10dBm
2. DC voltage: 5V
3. Operating Temperature: -25°C to +75°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

Reference temperature: 25°C

<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>420</td>
<td>-</td>
</tr>
<tr>
<td>Minimum Insertion Loss IL min (reference level)</td>
<td>dB</td>
<td>-</td>
<td>1.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Ripple Fc ± 10MHz</td>
<td>dB</td>
<td>1.3</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>

Relative Attenuation:(Reference level from IL min)

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>dB</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>320 to 340MHz</td>
<td>45</td>
<td>60</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>365 to 385MHz</td>
<td>40</td>
<td>58</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Temperature coefficient of frequency</td>
<td>ppm/K</td>
<td>-</td>
<td>-37</td>
<td>-</td>
</tr>
<tr>
<td>Source impedance Z_S</td>
<td>Ω</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Load impedance Z_L</td>
<td>Ω</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: IL min is the minimum of the pass band attenuation. The center frequency Fc is the mean value of the upper and lower frequencies at the 2.5dB filter attenuation level relative to the IL min.
C. FREQUENCY CHARACTERISTICS:

![Graph 1](image1.png)

![Graph 2](image2.png)
D. MEASUREMENT CIRCUIT:

HP Network analyzer

50Ω → J → SAW Filter → D → 50Ω

A, B, C, E, F, G, H, I, K, L

E. OUTLINE DRAWING:

J: Input
D: Output
Unit: mm

F. PCB FOOTPRINT:
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION