SAW Filter 403.50MHz  
Part No: MP07644

Model: TA1135B  
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device

1. Input Power Level: 20dBm
2. DC voltage: 3V
3. Operating Temperature: -10°C to 60°C
4. Storage Temperature: -40°C to +85°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>MH</td>
<td>-</td>
<td>403.5</td>
<td>-</td>
</tr>
<tr>
<td>Minimum Insertion loss 402 ~ 405MHz IL min</td>
<td>dB</td>
<td>-</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Passband Ripple 402 ~ 405MHz</td>
<td>-</td>
<td>0.3</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>3dB Bandwidth BW -3dB</td>
<td>MHz</td>
<td>3</td>
<td>7.6</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (Reference level from IL min dB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>358.5 MHz</td>
<td>dB</td>
<td>40</td>
<td>64</td>
<td>-</td>
</tr>
<tr>
<td>358.5 ~ 384.0MHz</td>
<td>dB</td>
<td>35</td>
<td>59</td>
<td>-</td>
</tr>
<tr>
<td>415.0 ~ 423.0MHz</td>
<td>dB</td>
<td>25</td>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>423.0 ~ 503.0MHz</td>
<td>dB</td>
<td>40</td>
<td>59</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 1: 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 3dB filter attenuation level relative to the IL min.

Note 2: The room temperature, Tr, is 25°C. FTC is temperature coefficient of frequency. The nominal frequency at temperature, Tc, may be calculated from \( f = Fc \times [1-FTC(Tr-Tc)] \).

C. MEASUREMENT CIRCUIT:

HP Network analyzer

![Measurement Circuit Diagram](image-url)
D. FREQUENCY CHARACTERISTICS:

![Graph of Frequency Characteristics](image-url)
SAW Filter 403.50MHz
Model: TA1135B
Part No: MP07644
Rev No: 1

E. OUTLINE DRAWING:

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

Unit: mm

F. PCB FOOTPRINT:
G. PACKING:

1. Reel Dimension (Please refer to FR-75D10 for packing quantity)

2. Tape Dimension

Direction of Feed
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 260°C+0/-5°C peak (20–40sec).
4. Time: 2 times.