SAW Filter 315.00MHz  
Part No: MA09183  
Model: TA0657A  
Rev no: 2

A. MAXIMUM RATING:  

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 15dBm  
2. DC voltage: 3V  
3. Operating Temperature: -40°C to 85°C  
4. Storage Temperature: -40°C to +85°C

B. 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>315</td>
<td>-</td>
</tr>
<tr>
<td>Maximum Insertion loss 314.70 ~ 315.30MHz IL</td>
<td>dB</td>
<td>-</td>
<td>1.52</td>
<td>2.5</td>
</tr>
<tr>
<td>Amplitude ripple 314.70 ~ 315.30MHz</td>
<td>dB</td>
<td>-</td>
<td>0.4</td>
<td>1.2</td>
</tr>
<tr>
<td>VSWR 314.70 ~ 315.30MHz</td>
<td></td>
<td>-</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Attenuation (Reference level from Max IL dB)</td>
<td>dB</td>
<td>55</td>
<td>65</td>
<td>-</td>
</tr>
<tr>
<td>270.0 ~ 286.0 MHz</td>
<td></td>
<td>53</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>293.0 ~ 293.9 MHz</td>
<td></td>
<td>48</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>304.0 ~ 304.6 MHz</td>
<td></td>
<td>24</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>325.4 ~ 326.0 MHz</td>
<td></td>
<td>36</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>336.1 ~ 337.0 MHz</td>
<td></td>
<td>50</td>
<td>60</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>
<tr>
<td>Temperature coefficient</td>
<td>ppm/k</td>
<td>-</td>
<td>-36</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: No matching network required for operation at 50Ω

C. MEASUREMENT CIRCUIT:

![Measurement Circuit Diagram]

HP Network analyzer

50Ω  B  SAW Filter  E  50Ω

A,C,D,F

TA0657A v2
D. FREQUENCY CHARACTERISTICS:

Transfer Function
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)

![Diagram of Reel Dimensions]

2. Tape Dimension

![Diagram of Tape Dimensions]

SECTION A-A

SECTION B-B

DIMENSION: mm

Direction of Feed
H. RECOMMENDED REFLOW PROFILE: