110.5920MHz SAW Filter  
Model: TB0603A  
Part No: MA09828  
REV NO.: 1

A. MAXIMUM RATING:

1. Operating Temperature: -40°C ~ +85°C  
2. Storage Temperature: -40°C ~ +85°C  
3. Input Power Level: 10dBm

B. CHARACTERISTICS:

1. Ambient Temperature: 25°C  
2. Terminating Source Impedance: Single ended 50 ohm  
3. Terminating Load Impedance: Single ended 50 ohm

<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>110.592</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss, IL</td>
<td>dB</td>
<td>-</td>
<td>8.6</td>
<td>10</td>
</tr>
<tr>
<td>3 dB Bandwidth</td>
<td>MHz</td>
<td>1.152</td>
<td>1.44</td>
<td>-</td>
</tr>
<tr>
<td>Group Delay Variation Fc, 0.576</td>
<td>nsec</td>
<td>-</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Rejection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC to Fc-3.4MHz</td>
<td></td>
<td>38</td>
<td>42</td>
<td>-</td>
</tr>
<tr>
<td>Fc-3.4MHz to Fc-1.728MHz</td>
<td></td>
<td>28</td>
<td>42</td>
<td>-</td>
</tr>
<tr>
<td>Fc+1.728MHz to Fc+3.4MHz</td>
<td></td>
<td>28</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>Fc+3.4MHz to 200MHz</td>
<td></td>
<td>38</td>
<td>42</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. S21 Response

![S21 Log Mag Fig. 1](image)

Fig. 1 Horizontal: 2MHz/Div; Vertical: 10dB/Div

2. Passband Response

![S21 Log Mag Fig. 2](image)

Fig. 2 Passband Horizontal: 0.5MHz/Div; Vertical: 3dB/Div
3. Group Delay

![Graph showing group delay with specifications](image)

Fig. 3 Passband Horizontal: 0.5MHz/Div; Vertical: 200nS/Div

D. OUTLINE DRAWING:

![Outline drawing of the SAW filter with pin configuration](image)

Pin configuration:
- #J RF Input
- #L RF Input ground
- #D RF Output
- #F RF Output ground
- #A,B,C,G,H,I To be ground

Unit: mm
E. MEASUREMENT CIRCUIT:

![Measurement Circuit Diagram]

F. PCB FOOTPRINT:

![PCB Footprint Diagram]
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION
110.5920MHz SAW Filter

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H. RECOMMENDED REFLOW PROFILE: