140.0MHz SAW Filter

Part No: MA05919

Model: TB0233A

REV NO.: 1

A. MAXIMUM RATING:

1. Input Power Level: +20 dBm
2. Operating Temperature: -10°C to +70°C
3. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Unit</th>
<th>Min.</th>
<th>Typical</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency, Fc</td>
<td>MHz</td>
<td>139.9</td>
<td>140.0</td>
<td>140.1</td>
</tr>
<tr>
<td>Insertion Loss, IL</td>
<td>dB</td>
<td>-</td>
<td>21.5</td>
<td>24.0</td>
</tr>
<tr>
<td>1 dB Bandwidth</td>
<td>MHz</td>
<td>24.3</td>
<td>24.6</td>
<td>-</td>
</tr>
<tr>
<td>3 dB Bandwidth</td>
<td>MHz</td>
<td>25.0</td>
<td>25.5</td>
<td>-</td>
</tr>
<tr>
<td>40 dB Bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>28.5</td>
<td>30.0</td>
</tr>
<tr>
<td>Relative Attenuation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 to 120 MHz</td>
<td>dB</td>
<td>50</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>160 to 280 MHz</td>
<td>dB</td>
<td>50</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple within Fc ± 10 MHz</td>
<td>dB</td>
<td>-</td>
<td>0.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Group delay ripple within Fc ± 10 MHz</td>
<td>nsec</td>
<td>-</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>Absolute Delay</td>
<td>usec</td>
<td>-</td>
<td>1.20</td>
<td>-</td>
</tr>
<tr>
<td>Substrate Material</td>
<td></td>
<td>-</td>
<td>LN</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

(1) Frequency Response

(2) Passband response and Group Delay variation
D. MEASUREMENT CIRCUIT:

Source and load impedance: 50 Ω

![Circuit Diagram]

L1=56 nH, C1=18 pF, L2=56 nH

E. OUTLINE DRAWING: