SAW Filter 1210MHz  
Model: TA1029A  
Part No: MP03213  
Rev No: 1

A. MAXIMUM RATING:

1. Input Power Level: 10dBm  
2. DC Voltage: 3V  
3. Operating Temperature: -40°C to +85°C  
4. Storage Temperature: -50°C to +95°C

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (differential): \( Z_S = 150\Omega // 82nH \)  
Terminating load impedance (differential): \( Z_L = 150\Omega // 82nH \)

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency Fc</td>
<td>MHz</td>
<td>-</td>
<td>1210</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bandwidth at -2dB</td>
<td>MHz</td>
<td>56</td>
<td>74</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss in 1180 ~ 1240MHz</td>
<td>dB</td>
<td>-</td>
<td>3.7</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple (1180 ~ 1240MHz)</td>
<td>dB</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Phase error (1180 ~ 1240MHz) (3)</td>
<td>deg</td>
<td>-</td>
<td>3.5</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>I/O VSWR (1180 ~ 1240MHz)</td>
<td></td>
<td>-</td>
<td>1.8</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>CMDR (1180 ~ 1240MHz)</td>
<td>dB</td>
<td>22</td>
<td>35</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 ~ 960MHz</td>
<td>dB</td>
<td>32</td>
<td>35</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>960 ~ 1120MHz</td>
<td>dB</td>
<td>40</td>
<td>43</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1315 ~ 2500MHz</td>
<td>dB</td>
<td>40</td>
<td>43</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2500 ~ 3200MHz</td>
<td>dB</td>
<td>35</td>
<td>39</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3200 ~ 6000MHz</td>
<td>dB</td>
<td>30</td>
<td>33</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:

The amplitude reference is insertion loss at Fc.

The amplitude ripple is defined as the max level - min level over any 36MHz block of the given bandwidth.

The phase error is measured over any 36MHz block of the given bandwidth.
C. OUTLINE DRAWING:

D. MEASUREMENT CIRCUIT:

E. PCB FOOTPRINT:
F. FREQUENCY CHARACTERISTICS:

![Graph 1: Log Mag 2.000dB/Ref -10.000dB]

1. 1.032000000 GHz -3.5073 dB
2. 1.226000000 GHz -3.1747 dB

![Graph 2: Log Mag -40.000dB]

1. 1.110000000 GHz -55.076 dB
2. 1.115000000 GHz -61.702 dB

Center 1.21 GHz  IFBW 3 kHz Span 200 MHz

TA1029A v1
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![Diagram of SAW Filter](image-url)
Reflection Functions

**S11**

**S22**
G. PACKING:

1. REEL DIMENSION

(Reel Count: 7" = 1000; 13" = 3000)

2. TAPE DIMENSION
H. RECOMMENDED REFLOW PROFILE:

![Reflow Profile Graph](image)