SAW Filter 1790.480MHz  
Part No: MP01169  
Model: TA0728A  
Rev No: 2

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:

1. Terminating source impedance (differential): \( Z_S = 150\Omega \parallel 22nH \)
2. Terminating load impedance (differential): \( Z_L = 150\Omega \parallel 22nH \)

<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 ( F_c )</td>
<td>MHz</td>
<td>-</td>
<td>1790.48</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bandwidth at -2 dB</td>
<td>MHz</td>
<td>40</td>
<td>60</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss in 1770.48 ~ 1810.48MHz</td>
<td>dB</td>
<td>-</td>
<td>2.8</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple (1770.48 ~ 1810.48MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.8</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Phase error (1770.48 ~ 1810.48MHz) (3)</td>
<td>deg</td>
<td>-</td>
<td>1.2</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Group Delay ripple(1770.48 MHz ~ 1810.48MHz)</td>
<td>ns</td>
<td>-</td>
<td>8</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>I/O VSWR (1770.48 ~ 1810.48 MHz)</td>
<td></td>
<td>-</td>
<td>1.8</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 ~ 1708.42MHz</td>
<td>dB</td>
<td>44</td>
<td>49</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1872.54 ~ 1912.5MHz</td>
<td>dB</td>
<td>44</td>
<td>56</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1912.5 ~ 4250MHz</td>
<td>dB</td>
<td>38</td>
<td>41</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4250 ~ 6000MHz</td>
<td>dB</td>
<td>30</td>
<td>38</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
1. The amplitude reference is insertion loss at \( F_c \).
2. The amplitude ripple is defined as the max. level - min. level over any 30MHz block of the given bandwidth.
3. The phase error is measured over any 30MHz block of the given bandwidth.
C. OUTLINE DRAWING:

D. MEASUREMENT CIRCUIT:

E. PCB FOOTPRINT:
F. FREQUENCY CHARACTERISTICS:

[Graph depicting frequency response characteristics for SAW Filter 1790.480MHz Model: TA0728A Part No: MP01169 Rev No: 2 with specific frequency points and values shown on the graph.]
Reflection Functions

**S11**

![Graph S11](image)

**S22**

![Graph S22](image)
G. PACKING:

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

2. Tape Dimension

SECTION A-A

SECTION B-B

DIMENSION:mm

Direction of Feed
H. RECOMMENDED REFLOW PROFILE:

![Graph showing reflow profile with temperature on the y-axis and time on the x-axis. The graph peaks at around 280°C and exceeds 250°C at some point.](image-url)