SAW Filter 2450.0MHz Model: TA1629A
Part No: MP05240 Rev No: 4

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 28dBm
2. DC Voltage: 3V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

1. Terminating source impedance: $Z_S = 50\, \Omega$
2. Terminating load impedance: $Z_L = 50\, \Omega$

<table>
<thead>
<tr>
<th>Parameters Description</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>2450.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Max. Insertion Loss within 2400.0 ~ 2500.0MHz</td>
<td>dB</td>
<td>-</td>
<td>1.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Amplitude Ripple within 2400.0 ~ 2500.0MHz</td>
<td>dB p-p</td>
<td>-</td>
<td>0.4</td>
<td>1.5</td>
</tr>
<tr>
<td>VSWR within 2400.0 ~ 2500.0MHz</td>
<td>-</td>
<td>-</td>
<td>1.4</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Attenuation:

<table>
<thead>
<tr>
<th>Parameters Description</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.C ~ 960.0MHz</td>
<td>dB</td>
<td>35</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>960.0 ~ 1570.0MHz</td>
<td>dB</td>
<td>35</td>
<td>42</td>
<td>-</td>
</tr>
<tr>
<td>1570.0 ~ 1580.0MHz</td>
<td>dB</td>
<td>35</td>
<td>41</td>
<td>-</td>
</tr>
<tr>
<td>1580.0 ~ 1710.0MHz</td>
<td>dB</td>
<td>35</td>
<td>40</td>
<td>-</td>
</tr>
<tr>
<td>1710.0 ~ 1910.0MHz</td>
<td>dB</td>
<td>30</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>1910.0 ~ 1980.0MHz</td>
<td>dB</td>
<td>30</td>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>2110.0 ~ 2170.0MHz</td>
<td>dB</td>
<td>30</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>2640.0 ~ 3000.0MHz</td>
<td>dB</td>
<td>25</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>3000.0 ~ 4800.0MHz</td>
<td>dB</td>
<td>25</td>
<td>32</td>
<td>-</td>
</tr>
<tr>
<td>4800.0 ~ 5000.0MHz</td>
<td>dB</td>
<td>20</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>5000.0 ~ 6000.0MHz</td>
<td>dB</td>
<td>20</td>
<td>32</td>
<td>-</td>
</tr>
</tbody>
</table>

Note:

With Matching Network (Ref. Testing Environment Circuit as shown below).
C. FREQUENCY CHARACTERISTICS:

1. S21 Response (span 500MHz):

![Graph](image1)

2. S21 Response (span 6GHz):

![Graph](image2)
SAW Filter 2450.0MHz
Part No: MP05240

3. S11 & S22 VSWR Response (span 300MHz):

![Graph of S11 & S22 VSWR Response](image1.jpg)

4. S11 & S22 Smith Chart Response (span 500MHz):

![Graph of S11 & S22 Smith Chart Response](image2.jpg)
D. OUTLINE DRAWING:

![Outline Drawing](image)

B, C, E: Ground  
A: Input  
D: Output

E. MEASUREMENT CIRCUIT:

![Measurement Circuit](image)

Source & Load Impedance: 50Ω

F. FOOTPRINT:

![Footprint](image)

: Land Pattern  
Unit: mm
G. PACKING:

1. Reel Dimension (Please refer to FR-75D10 for packing quantity)

2. Tape Dimension
H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 245 ~ 260°C peak (min. 10 sec).
4. Time: 2 times.