SAW Filter 2650.0MHz
Part No: MP06446
Model: TA1684A
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm
2. DC Voltage: 3V
3. Operating Temperature: -40°C to +85°C (1)
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>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.(2)</th>
<th>Max.</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency $F_c$</td>
<td>MHz</td>
<td>-</td>
<td>2650</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Max. Insertion Loss (2640 ~ 2660MHz)</td>
<td>dB</td>
<td>-</td>
<td>1.5</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td>Passband ripple (2640 ~ 2660MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.4</td>
<td>1.5</td>
<td>-</td>
</tr>
<tr>
<td>S11 &amp; S22 VSWR</td>
<td></td>
<td>-</td>
<td>1.3</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Attenuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 ~ 2380MHz</td>
<td>dB</td>
<td>33</td>
<td>37</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2380 ~ 2420MHz</td>
<td>dB</td>
<td>45</td>
<td>48</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2520 ~ 2540MHz</td>
<td>dB</td>
<td>35</td>
<td>41</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3000 ~ 4500MHz</td>
<td>dB</td>
<td>30</td>
<td>38</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Package size</td>
<td>mm</td>
<td></td>
<td>SMD 3.0x3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temp Coefficient</td>
<td>ppm/K</td>
<td>-36</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
(1). In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature.
(2). Typical values are based on average measurements at room temperature.
C. FREQUENCY CHARACTERISTICS:

1. S21 Response: (span 500MHz)

![S21 Log Mag 1GHz Ref -40.00dB](Image)

2. Pass band Response: (span 150MHz)

![S21 Log Mag 1GHz Ref -40.00dB](Image)
3. S11 & S22 VSWR Response: (span 150MHz)

![Graph showing S11 & S22 VSWR Response]

4. Wide band Response: (span 4.5GHz)

![Graph showing Wide band Response]
D. MEASUREMENT CIRCUIT:

\[\text{TESTING ENVIRONMENT}\]

\[\text{INPUT} \quad \text{OUTPUT}\]

E. OUTLINE DRAWING:

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

Unit: mm

F. PCB FOOTPRINT:
G. PACKING:

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

2. Tape Dimension
H. RECOMMENDED REFLOW PROFILE:

![Reflow Profile Graph]

- Time (Sec) range from 0 to 360
- Temperature (°C) range from 20 to 280

[Graph showing reflow profile with temperature and time axes]