A. MAXIMUM RATING:

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>2530</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Max. Insertion Loss (2520 ~ 2540MHz) IL</td>
<td>dB</td>
<td>-</td>
<td>1.3</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td>Passband ripple (2520 ~ 2540MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.3</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>
</tbody>
</table>

Attenuation

<table>
<thead>
<tr>
<th>Range</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ~ 2380MHz</td>
<td>dB</td>
<td>33</td>
<td>35</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2380 ~ 2420MHz</td>
<td>dB</td>
<td>40</td>
<td>44</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2640 ~ 2660MHz</td>
<td>dB</td>
<td>50</td>
<td>56</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2660 ~ 4500MHz</td>
<td>dB</td>
<td>30</td>
<td>33</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Package size mm SMD 3.0 x 3.0

Temp Coefficient ppm/K -36 -

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 Response Graph]

2. Pass band Response: (span 150MHz)

![Pass band Response Graph]
3. S11 & S22 VSWR Response: (span 150MHz)

4. Wide band Response: (span 4.5GHz)
D. MEASUREMENT CIRCUIT:

**TESTING ENVIRONMENT**

- **INPUT**
- **OUTPUT**

E. OUTLINE DRAWING:

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

Unit: mm

F. PCB FOOTPRINT:

Unit: mm
G. PACKING:

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

2. Tape Dimension

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SECTION A-A
SAW Filter 2530.0MHz
Model: TA1683A
Part No: MP08089
Rev No: 1

H. RECOMMENDED REFLOW PROFILE: