SAW Filter 2602.50MHz  
Model: TA1971A  
Part No: MP07865  
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 10dBm (In-band) 17dBm (Out-band)
2. Operating Temperature: -30°C to +85°C
3. Storage Temperature: -40°C to +85°C
4. ESD 50V (MM) 100V (HBM)

B. ELECTRICAL CHARACTERISTICS:

1. Terminating source impedance (single ended): \( Z_S = 50\, \Omega \)
2. Terminating load impedance (Balanced): \( Z_L = 100\, \Omega \)

<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>2602.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (2550 ~ 2655MHz) ( IL )</td>
<td>dB</td>
<td>-</td>
<td>1.8</td>
<td>2.7</td>
<td>-</td>
</tr>
<tr>
<td>Amplitude ripple (2550 ~ 2655MHz)</td>
<td>dB p-p</td>
<td>-</td>
<td>0.6</td>
<td>2.0</td>
<td>-</td>
</tr>
<tr>
<td>VSWR (2550 ~ 2655MHz)</td>
<td></td>
<td>-</td>
<td>1.6</td>
<td>2.0</td>
<td>-</td>
</tr>
<tr>
<td>Temperature Coefficient of Frequency</td>
<td>ppm/°C</td>
<td>-</td>
<td>-36</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (reference level from 0dB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>880 ~ 915 MHz (GSM900 Tx)</td>
<td>dB</td>
<td>50</td>
<td>70</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1710 ~ 1785 MHz (DCS1800 Tx)</td>
<td>dB</td>
<td>35</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2401 ~ 2482 MHz (ISM Band)</td>
<td>dB</td>
<td>13</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. MEASUREMENT CIRCUIT:

Source Impedance: 50Ω, Load Impedance: 100Ω

D. OUTLINE DRAWING:

B, E: Ground
A: Input
C, D: Balanced output

E. PCB FOOTPRINT:
F. FREQUENCY CHARACTERISTICS:

1. Frequency Response

![Graph of Frequency Response](image1)

![Graph of Frequency Response](image2)
2. Reflection Functions

VSWR

Smith Chart
G. PACKING:

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

2. Tape Dimension

SECTION A-A

SECTION B-B

Direction of Feed
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.