SAW Filter 866.0MHz
Part No: MP05434
Model: TA1687A
Rev No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input Power Level: 13dBm
2. DC Voltage: 0V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min</th>
<th>Typ.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency ( F_c )</td>
<td>MHz</td>
<td>-</td>
<td>866</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (863 ~ 870MHz) IL</td>
<td>dB</td>
<td>2.6</td>
<td>3.5max</td>
<td></td>
</tr>
<tr>
<td>Amplitude ripple (863 ~ 870MHz)</td>
<td>dB</td>
<td>0.6</td>
<td>1.2max</td>
<td></td>
</tr>
<tr>
<td>Attenuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 ~ 300MHz</td>
<td>dB</td>
<td>45</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>300 ~ 840MHz</td>
<td>dB</td>
<td>40</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>883 ~ 892MHz</td>
<td>dB</td>
<td>30</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>892 ~ 1000MHz</td>
<td>dB</td>
<td>30</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Package size</td>
<td>mm</td>
<td></td>
<td>SMD 3x3</td>
<td></td>
</tr>
</tbody>
</table>

C. TEST CIRCUIT:

Network analyzer

From 50Ω Network Analyzer

To 50Ω Network Analyzer
D. FREQUENCY CHARACTERISTICS:

1. S21 response: (Span 200MHz)

![Graph of S21 response spanning 200MHz](image1)

2. S21 response: (Span 20MHz)

![Graph of S21 response spanning 20MHz](image2)
3. S21 response: (100kHz ~ 3GHz)

![S21 response graph]

4. S11/S22 response:

![S11/S22 response graphs]
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E. OUTLINE DRAWING:

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

Unit: mm
F. PACKING:

1. Reel Dimension

2. Tape Dimension

SECTION A-A

Direction of Feed
G. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile for SAW Filter 866.0MHz Model: TA1687A Part No: MP05434 Rev No: 1]