SAW Filter 836.50MHz
Part No: MA05421

A. MAXIMUM RATING:

1. Input Power Level: 10dBm
2. DC voltage: 0V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Item</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc (dB)</td>
<td>-</td>
<td>836.5</td>
<td>-</td>
</tr>
<tr>
<td>Insertion loss within 824 ~ 849MHz IL (dB)</td>
<td>-</td>
<td>2.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Amplitude ripple (p-p) within 824 ~ 849MHz (dB)</td>
<td>-</td>
<td>1.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Attenuation (Reference level from 0dB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.C. ~ 800MHz (dB)</td>
<td>23.0</td>
<td>26.0</td>
<td>-</td>
</tr>
<tr>
<td>869 ~ 894MHz (dB)</td>
<td>29.0</td>
<td>32.0</td>
<td>-</td>
</tr>
<tr>
<td>978 ~ 1006MHz (dB)</td>
<td>25.0</td>
<td>28.0</td>
<td>-</td>
</tr>
<tr>
<td>1050 ~ 2500MHz (dB)</td>
<td>15.0</td>
<td>18.0</td>
<td>-</td>
</tr>
<tr>
<td>VSWR within 824 ~ 849MHz</td>
<td>-</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Source impedance Zs (Ω)</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Load impedance ZL (Ω)</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>

Note 1: No matching network required for operation at 50Ω

C. MEASUREMENT CIRCUIT:

HP Network analyzer

50Ω  B  SAW Filter  E  50Ω

A, C, D, F
D. FREQUENCY CHARACTERISTICS:

[Graph showing frequency characteristics]

TA0169A v4
Reflections Functions

S11

TA0169A v4
SAW Filter 836.50MHz
Model: TA0169A
Part No: MA05421
Rev No: 4

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3 Apr 2002 17:25:16

3 Apr 2002 17:25:24

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Ta0169A v4
SAW Filter 836.50MHz  
Model: TA0169A  
Part No: MA05421  
Rev No: 4

E. OUTLINE DRAWING:

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

F. PCB FOOTPATH:
G. PACKING:

1. Reel Dimension

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.