SAW Filter 827.40MHz  
Model: TB1023A  
Part No: MP05960  
Rev No: 1

A. MAXIMUM RATING:

   Electrostatic Sensitive Device

1. Operating temperature range: -20°C to 70°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 10 dBm
4. Maximum DC Voltage: 10V

B. CHARACTERISTICS:

   Ambient Temperature: 25°C

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
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<tbody>
<tr>
<td></td>
<td>Min.</td>
</tr>
<tr>
<td>Center frequency MHz</td>
<td>-</td>
</tr>
<tr>
<td>Maximum Insertion loss IL dB</td>
<td>-</td>
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<tr>
<td>1dB Band Width MHz</td>
<td>4.5</td>
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<tr>
<td>20dB Band Width MHz</td>
<td>-</td>
</tr>
<tr>
<td>Passband Ripple at Fc ± 2.25 MHz dB</td>
<td>-</td>
</tr>
<tr>
<td>Absolute group Delay usec</td>
<td>-</td>
</tr>
<tr>
<td>Single Input Impedance Ω</td>
<td>-</td>
</tr>
<tr>
<td>Single Output Impedance Ω</td>
<td>-</td>
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<tr>
<td>Temperature Coefficient ppm/°C2</td>
<td>-</td>
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</tbody>
</table>
C. FREQUENCY RESPONSES:

1. Wide band response

![Wide band response graph]

Fig.1: Horizontal: 5MHz / Div, Vertical: 10dB / Div

2. Pass band & Group Delay response

![Pass band & Group Delay graph]

Fig 2: Horizontal: 1MHz / Div, Vertical: 1dB / Div, Vertical: 100ns / Div
D. OUTLINE DRAWING:

![Outline Drawing]

K: Input
L: Input Ground
E: Output
F: Output Ground
A, B, C, D, G, H, I, J: Ground
Unit: mm

E. MATCHING CIRCUIT:

![Matching Circuit Diagram]

L1 = 3nH, L2 = 5.6nH, C1 = 4.7pF, C2 = 3.9pF

F. PCB FOOTPRINT:

![PCB Footprint Diagram]

Unit: mm
G. PACKING:

1. Reel Dimension

2. Tape Dimension
H. RECOMMENDED REFLOW PROFILE: