SAW Resonator 907.20MHz
Model: TC0315A
Part No: MA09336
Rev No: 1

A. FEATURES:

One - Port Resonator

B. MAXIMUM RATING:

1. Input Power Level: 0dBm
2. DC voltage: 12V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

C. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Units</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fr</td>
<td>MHz</td>
<td>907.075</td>
<td>907.2</td>
<td>907.325</td>
</tr>
<tr>
<td>Insertion Loss IL</td>
<td>dB</td>
<td>1.4</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Unloaded Quality factor</td>
<td></td>
<td>-</td>
<td>8870</td>
<td>-</td>
</tr>
</tbody>
</table>

Equivalent Elements

<table>
<thead>
<tr>
<th>Equivalent Elements</th>
<th>Units</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motional capacitance C1</td>
<td>fF</td>
<td>-</td>
<td>1.01</td>
<td>-</td>
</tr>
<tr>
<td>Motional inductance L1</td>
<td>μH</td>
<td>-</td>
<td>30.5</td>
<td>-</td>
</tr>
<tr>
<td>Motional resistance R1</td>
<td>Ohm</td>
<td>-</td>
<td>19.6</td>
<td>-</td>
</tr>
<tr>
<td>Parallel capacitance Co</td>
<td>pF</td>
<td>-</td>
<td>2.12</td>
<td>-</td>
</tr>
<tr>
<td>Temp. coeff.</td>
<td>ppm / c*2</td>
<td>-</td>
<td>0.032</td>
<td>-</td>
</tr>
<tr>
<td>Turnover To</td>
<td>deg. C</td>
<td>-</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>Package size</td>
<td></td>
<td>SMD 3.8 X 3.8 X 1.4mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. EQUIVALENT CIRCUIT:

One - Port Resonator

![Equivalent Circuit Diagram]

E. FREQUENCY CHARACTERISTICS:

![Frequency Characteristics Graph]

- Center: 907.200 MHz
- Span: 3.000 MHz
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F. TEST CIRCUIT:

Network analyzer

From 50Ω  
Network  
Analyzer

50Ω  
SAW Resonator  
50Ω

A, C, D, F

To 50Ω  
Network  
Analyzer

G. OUTLINE DRAWING:
SAW Resonator 907.20MHz  
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H. PCB FOOTPRINT:

![PCB Footprint Diagram]
I. PACKING:

1. Reel Dimension

2. Tape Dimension

Direction of feed