TC0437A v2

SAW Resonator 315.0MHz
Part No: MP05119
Rev No: 2

A. FEATURES:

One - Port Resonator

Electrostatic Sensitive Device

B. MAXIMUM RATING:

1. Input Power Level: 10dBm
2. DC voltage: 5V
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>314.925</td>
<td>315</td>
<td>315.075</td>
</tr>
<tr>
<td>Insertion Loss IL</td>
<td>dB</td>
<td>-</td>
<td>1.36</td>
<td>2.0</td>
</tr>
<tr>
<td>Equivalent Elements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motional capacitance C1</td>
<td>fF</td>
<td>-</td>
<td>2.53</td>
<td>-</td>
</tr>
<tr>
<td>Motional inductance L1</td>
<td>μH</td>
<td>-</td>
<td>101.09</td>
<td>-</td>
</tr>
<tr>
<td>Motional resistance R1</td>
<td>Ohm</td>
<td>-</td>
<td>16.73</td>
<td>-</td>
</tr>
<tr>
<td>Parallel capacitance Co</td>
<td>pF</td>
<td>-</td>
<td>4.25</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></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SMD 5.0 X 3.5 X 1.4mm</td>
<td></td>
</tr>
</tbody>
</table>
D. EQUIVIRENT CIRCUIT:

One-Port Resonator:

![Equivalent Circuit Diagram]

E. OUTLINE DRAWING:

![Outline Drawing]

Pin 1 : Input
Pin 3 : Output
Pin 2, 4 : Ground
F. FREQUENCY CHARACTERISTICS:

![Frequency Characteristics Graph]

G. TEST CIRCUIT:

![Test Circuit Diagram]
H. PACKING:

1. Reel Dimension

2. Tape Dimension

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I. RECOMMENDED REFLOW PROFILE:

![Temperature vs Time Graph](image-url)