1000MHz SAW Resonator

Model: TC0337A

Part No: MP01036

A. FEATURES:
   1. 1-Port Resonator.

B. MAXIMUM RATING:
   1. Input Power Level: 10 dBm
   2. DC voltage: 3 V
   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>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fr</td>
<td>MHz</td>
<td>999.950</td>
<td>1000</td>
<td>1000.050</td>
</tr>
<tr>
<td>Insertion Loss IL</td>
<td>dB</td>
<td>-</td>
<td>1.75</td>
<td>2.3</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>0.92</td>
<td>-</td>
</tr>
<tr>
<td>Motional inductance L1</td>
<td>μH</td>
<td>-</td>
<td>27.5</td>
<td>-</td>
</tr>
<tr>
<td>Motional resistance R1</td>
<td>Ohm</td>
<td>-</td>
<td>21.5</td>
<td>-</td>
</tr>
<tr>
<td>Parallel capacitance Co</td>
<td>pF</td>
<td>-</td>
<td>2.11</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 3.8X3.8X1.4mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. EQUIVALENT CIRCUIT:

One-Port Resonator:

```
C0
#B
50Ω
R1
Cl
L1

#E
50Ω
```
E. OUTLINE DRAWING:

![Outline Drawing](image)

F. FREQUENCY CHARACTERISTICS

![Frequency Characteristics](image)
1000MHz SAW Resonator
Model: TC0337A
Part No: MP01036
REV NO.: 1

G. TEST CIRCUIT:

Network analyzer

From 50Ω B E
50Ω SAW Resonator
50Ω
A, C, D, F
To 50Ω

H. LAND PATTERN:
I. PACKING:
   1. REEL DIMENSION

   ![Reel Dimension Diagram]

2. TAPE DIMENSION

   ![Tape Dimension Diagram]
J. RECOMMENDED REFLOW PROFILE:

![Reflow Profile Graph]

- Temperature (°C) on the y-axis
- Time (Sec) on the x-axis
- Graph shows temperature changes over time during reflow process.