SAW Resonator 622.080MHz
Part No: MA04386

Model: TC0137A
REV NO.: 2

A. FEATURES:
1. 1-Port Resonator.

B. MAXIMUM RATING:
1. Input Power Level: 0 dBm
2. DC voltage: 12 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>622.005</td>
<td>622.080</td>
<td>622.155</td>
</tr>
<tr>
<td>Insertion Loss IL</td>
<td>dB</td>
<td>1.1</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td>Unloaded Quality factor</td>
<td></td>
<td></td>
<td>10275</td>
<td>-</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>1.75</td>
<td>-</td>
</tr>
<tr>
<td>Motional inductance L1</td>
<td>µH</td>
<td>-</td>
<td>37.46</td>
<td>-</td>
</tr>
<tr>
<td>Motional resistance R1</td>
<td>Ohm</td>
<td>-</td>
<td>14.25</td>
<td>-</td>
</tr>
<tr>
<td>Parallel capacitance Co</td>
<td>pF</td>
<td>-</td>
<td>2.89</td>
<td>-</td>
</tr>
<tr>
<td>Temp.coeff. ppm/c*2</td>
<td></td>
<td>-</td>
<td>0.032</td>
<td>-</td>
</tr>
<tr>
<td>Turnover To deg.C</td>
<td></td>
<td>10</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>Package size</td>
<td></td>
<td>SMD 3.8X3.8X1.2mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SAW Resonator 622.080MHz
Part No: MA04386

D. OUTLINE DRAWING:

E. EQUIVALENT CIRCUIT:
One-Port Resonator:

Source Impedance 50Ω  C0
#B

Load Impedance 50Ω
#E

R1  C1  L1
SAW Resonator 622.080MHz  
Model: TC0137A  
Part No: MA04386  
REV NO.: 2

F. FREQUENCY CHARACTERISTICS:

![Graph showing frequency characteristics]

(Center Freq.=622.08MHz, Span=3MHz)

G. TEST CIRCUIT:

Network analyzer

From 50Ω Network Analyzer  →  SAW Resonator  ←  To 50Ω Network Analyzer

50Ω
A.C.D.F
SAW Resonator 622.080MHz
Model: TC0137A
Part No: MA04386
REV NO.: 2

H. PACKING:
1. REEL DIMENSION

2. TAPE DIMENSION