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>403.475</td>
<td>403.550</td>
<td>403.625</td>
</tr>
<tr>
<td>Insertion Loss IL</td>
<td>dB</td>
<td>-</td>
<td>0.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Unloaded Quality factor, U</td>
<td></td>
<td>-</td>
<td>14400</td>
<td>-</td>
</tr>
<tr>
<td>Loaded Quality factor, QL</td>
<td></td>
<td>-</td>
<td>1000</td>
<td>-</td>
</tr>
<tr>
<td>Frequency aging</td>
<td>ppm/yr</td>
<td></td>
<td></td>
<td>±10</td>
</tr>
<tr>
<td>Equivalent Circuit Elements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motional capacitance C1</td>
<td>pF</td>
<td>-</td>
<td>2.2</td>
<td>-</td>
</tr>
<tr>
<td>Motional inductance L1</td>
<td>µH</td>
<td>-</td>
<td>70.6</td>
<td>-</td>
</tr>
<tr>
<td>Motional resistance R1</td>
<td>Ohm</td>
<td>-</td>
<td>12.43</td>
<td>19</td>
</tr>
<tr>
<td>Parallel capacitance Co</td>
<td>pF</td>
<td>-</td>
<td>3.68</td>
<td>-</td>
</tr>
<tr>
<td>Temp.coeff.</td>
<td>ppm/c²</td>
<td>-</td>
<td>0.032</td>
<td>-</td>
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<tr>
<td>Turnover To</td>
<td>°C</td>
<td>10</td>
<td>-</td>
<td>40</td>
</tr>
<tr>
<td>Package size</td>
<td></td>
<td></td>
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<td>SMD 5X5X1.4mm</td>
</tr>
</tbody>
</table>

SAW Resonator 403.550MHz

Part No: MA06348

Model: TC0215A

REV. NO.: 5
SAW Resonator 403.550MHz  
Model: TC0215A  
Part No: MA06348  

D. OUTLINE DRAWING:

![Outline Drawing](image)

E. EQUIVALENT CIRCUIT:

One-Port Resonator:

```
Source Impedance         | Load Impedance
50Ω                      | 50Ω
#2                       | #6
R1 CI L1                |
```

F. FREQUENCY CHARACTERISTICS:

![Frequency Characteristics](image)
SAW Resonator 403.550MHz
Part No: MA06348

G. TEST CIRCUIT:

Network analyzer

From 50Ω Network Analyzer to 50Ω Network Analyzer

SAW Resonator

H. PCB FOOTPRINT
I. PACKING:
1. REEL DIMENSION

2. TAPE DIMENSION

Direction of feed