RXO5032M

The RXO5032M is a high-frequency and low-jitter performance XO (Crystal Oscillator). With an impressively low RMS phase jitter 0.1 ps typ. (12 kHz to 20 MHz offset). It maintains remarkable performance even in a high-temperature operating range of up to 105°C.

This compact SMD (Surface Mount Device) has a 5.0 x 3.2 mm footprint, offering precise frequency stability. It caters to a wide spectrum of applications with a broad selection of industry-standard frequencies, ranging from 60 to 312.5 MHz. The RXO5032M boasts a short lead time, ensuring swift availability for your projects.

**Features**
- Fast sample turnaround
- LVCMOS, LVPECL, or LVDS output options
- 0.1 ps typ. RMS phase jitter (12 kHz to 20 MHz)
- Wide frequency range

**Applications**
- Base stations
- Ethernet
- DSL/ADSL
- WiMAX/W-LAN
- Wi-Fi

**Standard Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
<th>Test Condition / Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal frequency</td>
<td>60</td>
<td>200</td>
<td>105</td>
<td>MHz</td>
<td>LVPECL or LVDS</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-40</td>
<td></td>
<td>105</td>
<td>°C</td>
<td>Temperature range: -40 to 85°C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>±25</td>
<td>ppm</td>
<td>Temperature range: -40 to 105°C</td>
</tr>
<tr>
<td>Temperature stability</td>
<td>±50</td>
<td>ppm</td>
<td></td>
<td></td>
<td>Including frequency calibration, operating temperature range, supply and load variations, and 1 year ageing at 25°C. 10 years ageing available on request</td>
</tr>
<tr>
<td>Frequency stability</td>
<td>±50</td>
<td>ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply voltage (Vdd)</td>
<td>3.3</td>
<td></td>
<td></td>
<td>V</td>
<td>With a tolerance of ±5%</td>
</tr>
<tr>
<td>Supply current</td>
<td>50</td>
<td>70</td>
<td></td>
<td>mA</td>
<td>For LVDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For LVPECL</td>
</tr>
<tr>
<td>RMS phase jitter (@122.88 MHz)²</td>
<td>0.1</td>
<td>0.15</td>
<td></td>
<td>ps</td>
<td>Integrated from 12kHz to 20MHz</td>
</tr>
</tbody>
</table>

**Model Outline and Recommended Pad Layout**

**Note:** Outline unit is mm.

1. RMS phase jitter value varies depending on the output type and frequency.

**PIN CONNECTIONS**

1. E/D
2. NC
3. GND
4. Output
5. NC (LVCMOS) or Complementary Output (LVPECL/LVDS)
6. Vdd

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1. Issue: B, 27 September 2023
2. Specifications are subject to change without notice
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4. Contact Us

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1. 64x90 (x6)
2. 1.2x0.15
3. 0.64x0.90 (x6)
4. 0.6
5. 1.20
6. 5.0x3.2
7. 3.2x2.2
8. 1.00x1.30 (x6)
9. 2.54