RVX7050R

The RVX7050R VCXO combines high frequency, low phase noise (1.0 ps typical, 12 kHz to 20 MHz) and tight frequency stability. This compact SMD (Surface Mount Device) has a 7.0 x 5.0 mm footprint, offering precise frequency stability. It caters to a wide spectrum of applications with a broad selection of industry-standard frequencies, ranging from 8 to 1500 MHz. The RVX7050R boasts a short lead time, ensuring swift project availability.

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

**Applications**
- Ethernet (10G/40G)
- Communications
- Base Stations
- DSL/ADSL
- 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>8</td>
<td>8</td>
<td>200</td>
<td>1500</td>
<td>MHz LVCMOS or LVPECL or LVDS</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-40</td>
<td>85</td>
<td>5</td>
<td>°C</td>
<td>Temperature range: -40 to 85°C</td>
</tr>
<tr>
<td>Temperature stability</td>
<td>±35</td>
<td>ppm</td>
<td></td>
<td></td>
<td>Including frequency calibration, operating temperature range, supply and load variations, and 10 years ageing at 25°C</td>
</tr>
<tr>
<td>Frequency stability</td>
<td>±50</td>
<td>ppm</td>
<td></td>
<td></td>
<td>Referenced at Vc = 1.65V</td>
</tr>
<tr>
<td>Absolute pull range (APR)</td>
<td>±50</td>
<td>ppm</td>
<td></td>
<td></td>
<td>With a tolerance of ±5%</td>
</tr>
<tr>
<td>Supply voltage (Vdd)</td>
<td>2.5</td>
<td>3.3</td>
<td></td>
<td>V</td>
<td>For LVCMOS</td>
</tr>
<tr>
<td>Supply current</td>
<td>30</td>
<td>65</td>
<td>40</td>
<td>mA</td>
<td>For LVPECL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mA</td>
<td>For LVDS</td>
</tr>
<tr>
<td>RMS phase jitter</td>
<td>1.0</td>
<td>2.0</td>
<td>ps</td>
<td></td>
<td>Integrated from 12kHz to 20MHz</td>
</tr>
</tbody>
</table>

**Model Outline and Recommended Pad Layout**

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