## Specifications (characteristics)

<table>
<thead>
<tr>
<th>Item</th>
<th>Symbol</th>
<th>TG5032CCN (CMOS)</th>
<th>TG5032SCN (Clipped sine wave)</th>
<th>TCXO</th>
<th>Conditions / Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output frequency</td>
<td>f₀</td>
<td>10 MHz to 50 MHz</td>
<td>10 MHz to 50 MHz</td>
<td>Standard frequency</td>
<td></td>
</tr>
<tr>
<td>Supply voltage</td>
<td>Vcc</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>t_stg</td>
<td>-40°C to +90°C</td>
<td>Storage as single product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>T_use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Frequency tolerance</td>
<td>f_tol</td>
<td>±0.0 x 10⁸ Max</td>
<td>(10 MHz &lt; f ≤ 40 MHz)</td>
<td>After reflow, +25°C</td>
<td></td>
</tr>
<tr>
<td>b) Frequency/temperature characteristics</td>
<td>f₀-Tc</td>
<td>B: ±0.2 x 10⁸ Max for Stratum3</td>
<td>H: ±0.2 x 10⁸ Max for Stratum3</td>
<td>Option</td>
<td></td>
</tr>
<tr>
<td>c) Frequency/load coefficient</td>
<td>f₀-Load</td>
<td>±0.1 x 10⁸ Max</td>
<td>(10 MHz &lt; f ≤ 40 MHz)</td>
<td>Load ≤ ±1%</td>
<td></td>
</tr>
<tr>
<td>d) Frequency/voltage coefficient</td>
<td>f₀-Vcc</td>
<td>±0.2 x 10⁸ Max</td>
<td>(40 MHz &lt; f ≤ 50 MHz)</td>
<td>Vcc ≤ ±5%</td>
<td></td>
</tr>
<tr>
<td>e) Frequency aging</td>
<td>f_age</td>
<td>±0.5 x 10⁸ Max</td>
<td>+25°C, First year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holdover stability (Constant temperature)</td>
<td></td>
<td>±0.1 x 10⁸ Max (±25°C, 24 hours)</td>
<td>After 10 days of continuous operation</td>
<td>After 48 hours of continuous operation</td>
<td></td>
</tr>
<tr>
<td>Wander generation</td>
<td></td>
<td>Compliant with</td>
<td>G.R-124CORE, ITU-T G.8262</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free-run accuracy</td>
<td></td>
<td>±4.6 x 10⁸ Max</td>
<td>This includes item a), b), c), d) and e)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current consumption</td>
<td>Icc</td>
<td>5.0 mA Max / 6.0 mA Max</td>
<td>5.0 mA Max</td>
<td>Vcc - GND (DC)</td>
<td></td>
</tr>
<tr>
<td>Input resistance</td>
<td>Rin</td>
<td>100 kΩ Min</td>
<td>100 kΩ Min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency control range</td>
<td>f_cont</td>
<td>±5 x 10⁸ to ±10 x 10⁸</td>
<td>±5 x 10⁸ to ±10 x 10⁸</td>
<td>D: Vcc = 1.5 V ± 1.0 V at Vcc = 3.3 V</td>
<td></td>
</tr>
<tr>
<td>Frequency change polarity</td>
<td></td>
<td>Positive polarity</td>
<td>Positive polarity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symmetry</td>
<td>SYM</td>
<td>45% to 55%</td>
<td>GND level (DC cut)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output voltage</td>
<td>Vcc</td>
<td></td>
<td>90% Vcc Min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output level</td>
<td>Vre</td>
<td>0.8 V Min</td>
<td>Peak to Peak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rise time / Fall time</td>
<td>t_tr/f</td>
<td>8.0 ns Max</td>
<td>10% Vcc to 90% Vcc level, Load 15 pF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start-up time</td>
<td>t_str</td>
<td>5.0 ms Max</td>
<td>T&lt;0 to 90% Vcc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output load condition</td>
<td>Load</td>
<td>15 pF</td>
<td>10 kΩ/10 pf</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Please contact us for requirements not listed in this specification.*

## External dimensions

### Footprint (Recommended)

(Unit: mm)

![Footprint Diagram]
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