LOW PHASE NOISE PRECISION OCXO MV220

Features:
- Package height from 12.7 mm down to 10 mm
- Ultra low phase noise
- High stability vs. temperature: up to $\pm 5 \times 10^{-10}$
- Standard frequency 10.0 MHz

ORDERING GUIDE: MV220–C 2 F–Z12.7–10.0 MHz–LN

<table>
<thead>
<tr>
<th>Availability of certain stability vs. operating temperature range</th>
<th>5</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>05</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 0…+55°C</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>B -10…+60°C</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>C -20…+70°C</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>D -40…+70°C</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>EX -40…+85°C</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

A – available, NA – not available, C – consult factory
For 10 mm height - consult factory
For other temperature ranges see designation at the end of Data Sheet.

Phase noise, dBC/Hz, for 10 MHz, SIN

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>&lt;50</th>
<th>&lt;50</th>
<th>&lt;100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hz</td>
<td>&lt;90</td>
<td>&lt;90</td>
<td>&lt;100</td>
</tr>
<tr>
<td>10 Hz</td>
<td>&lt;120</td>
<td>&lt;120</td>
<td>&lt;133</td>
</tr>
<tr>
<td>100 Hz</td>
<td>&lt;153</td>
<td>&lt;153</td>
<td>&lt;158</td>
</tr>
<tr>
<td>1000 Hz</td>
<td>&lt;162</td>
<td>&lt;163</td>
<td>&lt;163</td>
</tr>
<tr>
<td>10000 Hz</td>
<td>&lt;165</td>
<td>&lt;168</td>
<td>&lt;168</td>
</tr>
</tbody>
</table>

Short-term stability (Allan deviation) per 1 sec (for 10 MHz)

- $<5 \times 10^{-12}$

Frequency stability vs. load changes

- $<5 \times 10^{-10}$

Frequency stability vs. power supply changes

- $<5 \times 10^{-10}$

Warm-up time within accuracy of $<4 \times 10^{-9}$ day at 25°C

- $<3$ min

Power supply (Us) 12V±5%

Steady state current consumption @ 25°C

- 230mA

Peak current consumption during warm-up (for “D” temp. range)

- $<550$mA

Frequency pulling range

- $>4 \times 10^{-7}$

with external voltage range (Uin)

- 0…±5V

Reference voltage (Uref) 0…±5V

Output

- SIN
- >800 mV RMS
- 50 Ohm±5%

Harmonic suppression

- >30dBc

Additional notes:
- Please consult factory for daily aging values. Normally typical correspondence of daily aging per day to aging per year is as following: $\pm 1 \times 10^{-3}$/year - $\pm 1 \times 10^{-6}$/day; $\pm 5 \times 10^{-4}$/year - $\pm 5 \times 10^{-10}$/day; $\pm 3 \times 10^{-9}$/year - $\pm 3 \times 10^{-10}$/day.
- Please mention RoHS requirement (if any) while requesting for quote or while placing PO.
- For non standard operating temperature ranges please use the following two letters designations (first letter for the lower limit, second letter for the upper limit), °C

A B C D E F G H J K L M N P Q R S T U W X

| -60 | -55 | -50 | -45 | -40 | -30 | -20 | -10 | 0 | +10 | +30 | +40 | +45 | +50 | +55 | +60 | +65 | +70 | +75 | +80 | +85 |

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