ULTRA-LOW NOISY DUAL FREQUENCY OCXO MV359

Features:
- Output frequencies: 10 MHz and 100 MHz
- Frequency stability: up to ±1E-9
- Operating temperature range: -40…+80°C
- Aging: up to ±2E-8/year
- Output signal: SIN
- Power supply: 12 V
- Short term stability ADEV: <1E-12 at 1 s
- Package: 67x44x18 mm

ORDERING GUIDE: MV359–B 3 F -100.0 MHz

<table>
<thead>
<tr>
<th>Availability of certain stability vs. operating temperature range</th>
<th>±5x10⁻⁹</th>
<th>±3x10⁻⁹</th>
<th>±2x10⁻⁹</th>
<th>±1x10⁻⁹</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 0…+50°C</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>B -10…+60°C</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>C</td>
<td>C</td>
</tr>
<tr>
<td>D -40…+70°C</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>EW -40…+80°C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

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

| Phase noise, dBC/Hz |
|---|---|---|
| 10 MHz output (optionally) | 100 MHz output |
| 1 Hz | <118 | <93 |
| 10 Hz | <143 | <123 |
| 100 Hz | <159 | <135 |
| 1 kHz | <165 | <160 |
| 10 kHz | <167 | <174 |
| 100 kHz | <167 | <176 |

Aging
- F ±5x10⁻⁹/year
- E ±3x10⁻⁹/year
- D ±2x10⁻⁹/year
- C ±1x10⁻⁹/year (C)

Frequency stability vs. load changes
- <5x10⁻¹⁰

Frequency stability vs. power supply changes
- <5x10⁻¹⁰

Warm-up time within accuracy of <±1x10⁻⁷ at 25°C
- <3 min

Power supply (U s)
- 12V±5%

Steady state current consumption @ 25°C
- <320 mA

Peak current consumption during warm-up
- <750 mA

Frequency pulling range (Positive slope)
- ±4x10⁻⁷

with external control voltage range (Uin)
- 0…+5

Output
- SIN

Level for 10MHz
- >4 dBm
- >8 dBm

Level for 100 MHz
- 50 Ohm±5%

Load
- <30 dBc

Harmonics
- 10-200 Hz, 3g

Vibrations
- 75g/±1ms

Shock
- -55…+85°C

Storage temperature range
- 67x44x18 mm

Additional notes:
- 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 | I | J | K | L | M | N | P | Q | R | S | T | U | W | X |
| -60 | -55 | -50 | -45 | -40 | -30 | -25 | -20 | -15 | -10 | 0 | +10 | +20 | +30 | +40 | +50 | +60 | +70 | +80 | +90 | +100 | +110 | +120 | +130 | +140 | +150 | +160 | +170 | +180 | +190 |

Due to continuous development and improvement Morion reserves the right to modify design or specifications of its products without prior notice.

Revision 2. May 2020