DOUBLE OVEN ULTRA PRECISION OCXO MV89

Features:
- Frequency range 4.096 – 10.0 MHz
- Very high stability vs. temperature – up to ±5x10^-11
- Very low aging – up to ±5x10^-9/year
- Not sensitive for rapid changes of ambient temperature
- Ideal for GPS, CDMA, 3G applications

ORDERING GUIDE: MV89–B 01 E–10.0 MHz

Availability of certain stability vs. operating temperature range

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A – available, NA – not available, C – consult factory

For other temperature ranges see designation at the end of Data Sheet

Package drawing:

Mechanical characteristics:

- Vibrations:
  - Frequency range: 1-500 Hz
  - Acceleration: 5g
- Shock:
  - Acceleration: 150 g
  - Duration: 2±0.5 ms
- Storage temperature range: -55…+80°C

ADDITIONAL NOTES:
- Showed values of frequency stability vs. temperature usually are tested in Still Air test conditions. Please inform factory about different conditions in operation to provide appropriate tests.
- Please consult factory for daily aging values. Normally typical correspondence of daily aging per day to aging per year is as following:
  - ±5x10^-8/year - ±5x10^-10/day;
  - ±3x10^-8/year - ±3x10^-10/day;
  - ±2x10^-8/year - ±2x10^-10/day;
  - ±1x10^-8/year - ±1x10^-10/day.
- 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 – available; C – consult factory

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<tr>
<td>A</td>
<td>-60</td>
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<td>-50</td>
<td>-45</td>
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<td>C</td>
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<td>+10</td>
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<td>F</td>
<td>+85</td>
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Short term stability (Allan deviation) per 1 s, typical: <2x10^-12
Frequency stability vs. load changes: <±1x10^-10
Frequency stability vs. power supply changes: <±1x10^-10
Warm-up time with accuracy of <5x10^-8: <15 min
Power supply (Us): 12V±5%
Steady state current consumption @ 25°C (still air): <350 mA
Peak current consumption during warm-up @ 25°C: <1.5 A
Frequency pulling range: >2.5x10^-7
with external control voltage range (Uin): 0…+5 V
Reference voltage (Uref): +5V

Output SIN
Level +7±20dBm
Load 50 Ohm±5%
Subharmonics (for 8.192, 10.0 MHz): <40 dBc
Harmonic suppression: >30 dBc
Phase noise, typical for 5 MHz:
  - 1 Hz: -105 dBc/Hz
  - 10 Hz: -130 dBc/Hz
  - 100 Hz: -145 dBc/Hz
  - 1000 Hz: -150 dBc/Hz
  - 10000 Hz: -155 dBc/Hz

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