

ULTRA PRECISION ULTRA LOW PHASE NOISE AND ADEV REFERENCE DOCXO MV336R

Features:

- Specially designed as a reference OCXO for precision phase noise and ADEV measurements
- Initial frequency accuracy at time of shipment: 10.0 MHz±300 ppm
- Allan deviation: up to 7...8x10⁻¹⁴ per 1 sec (measured value)
- Low sensitivity to change of ambient temperature: up to ±2x10⁻¹¹ vs. 0...+55°C
- High long-term stability: up to ±1x10⁻⁸/year
- Ultra low phase noise level close to the carrier
- Power supply: 12 V
- Available as RoHS
- No frequency control available

ORDERING GUIDE: MV336R-B 003 D - 10.0MHz - LN-1S/9E-14-10S/2.5E-13-100S/4.5E-13

Availability of certain stability vs. operating temperature range		± 5x10 ⁻¹¹	± 3x10 ⁻¹¹	± 2x10 ⁻¹¹
		005	003	002
A	0...+55 °C	A	A	A
B	-10...+60 °C	A	A	C
C	-20...+70 °C	C	C	C

A – available, C – consult factory

Availability of certain aging values	
E	±3x10 ⁻⁸ /year
D	±2x10 ⁻⁸ /year
C	±1x10 ⁻⁸ /year

Phase noise, dBc/Hz, at offset:		
Option	-	LN
0.1 Hz	< -94	< -94
1 Hz	< -120	< -124*
10 Hz	< -145	< -145
100 Hz	< -157	< -157
1000 Hz	< -161	< -161
10000 Hz	< -162	< -162

* measured value

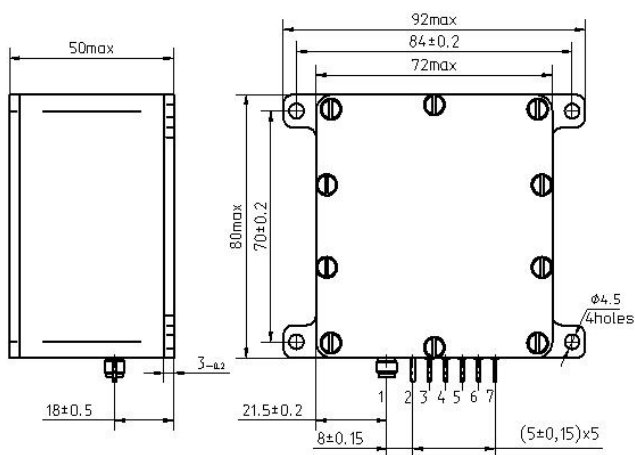
Short term stability (Allan deviation)		
Per 1 sec (measured values)	Per 10 sec (option)	Per 100 sec (option)
<1x10 ⁻¹³ (1E-13)		
<9x10 ⁻¹⁴ (9E-14)*	<5x10 ⁻¹³ (5E-13)	<8x10 ⁻¹³ (8E-13)
<8x10 ⁻¹⁴ (8E-14)*	<2.5x10 ⁻¹³ (2.5E-13)	<4.5x10 ⁻¹³ (4.5E-13)
<7x10 ⁻¹⁴ (7E-14)*		

* consult factory

Frequency stability vs. load changes (±5%)	< ±2x10 ⁻¹¹
Frequency stability vs. power supply changes (±1%)	< ±2x10 ⁻¹¹
Warm-up time within accuracy of <±5x10 ⁻⁸ @ 25°C	< 14 min
Power supply (U _s)	12 V ± 1%
Steady state current consumption @ +25°C ("still air")	< 650 mA
Peak current consumption during warm-up	< 1600 mA

Output waveform	SIN
Level	≥ 350 mV
Load	50 Ohm ± 5%
Harmonics	≤ -30 dBc

Vibrations:	
Frequency range	10-200 Hz
Acceleration	5 g
Shock:	75 g/3±1 ms
Humidity @ 25°C	98%
Storage temperature range	-55...+85°C



Pin	Function
1	Output signal SMA
2	Ground (case)
3	NC
4	NC
5	NC
6	NC
7	Power supply

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

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