MINIATURE PRECISION OCXO MV205

Features:

- *Package height from 16 mm, down to 10 mm*
- *High stability vs. temperature: up to ±1x10^{-9}*
- *Long term stability up to ±2x10^{-8}/year*
- *Fast warm-up time up to 1 min*
- *Available as RoHS*
- *Frequency range: 16.384 … 50.0 MHz*

Power supply
12V
5V
3.3 V

Output
SIN
HCMOS

Package type	
36x27x16.0 mm **	B16
36x27x12.7 mm	B12.7
36x27x10.0 mm	B10

ORDERING GUIDE: MV205 – C 3 G – 12V – SIN – B12.7- LN-20.0 MHz

Availability of certain stability vs. operating temperature range for 20 MHz		± 5x10^{-9}	± 3x10^{-9}	± 2x10^{-9}	± 1x10^{-9}
		5	3	2	1
A	0…+55 °C	A	A	A	A
B	- 10…+60 °C	A	A	A	A
C	- 20…+70 °C	A	A	A	A
D	- 40…+70 °C	A	A	A	C
EX	-40…+85 °C	A	A	A	C

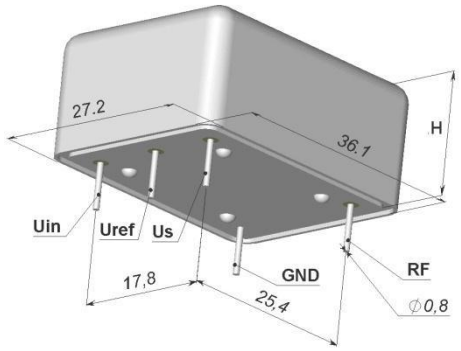
A – available, NA – not available, C – consult factory
For other temperature ranges see designation at the end of Data Sheet

Availability of certain aging values for certain frequencies		Standard frequencies					
		16.384MHz (8.192x2)	20.0MHz (10.0x2)	24.576 (49.152)MHz	25.6MHz (12.8x2)	26.0MHz (13.0x2)	32.768MHz (16.384x2)
H	±2x10^{-7}/ year	A	A	A	A	A	A
G	±1x10^{-7}/ year	A	A	A	A	A	C
F	±5x10^{-8}/ year	A	A	A	A	C	NA
E	±3x10^{-8}/ year	A	A	A	C	NA	NA
D	±2x10^{-8}/ year	A	A	A	NA	NA	NA

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

Phase noise, dBc/Hz, for 20MHz (10MHz x 2), SIN, 12V, 5 V:	_	Contact Factory	
		LN	ILN
1 Hz	<-90	<-95	<-100
10 Hz	<-120	<-125	<-130
100 Hz	<-135	<-140	<-143
1000 Hz	<-145	<-150	<-150
10000 Hz	<-150	<-153	<-153
100000 Hz	<-150	<-153	<-153

Package drawing:



For "H" definition, please see package type

Short term stability (Allan deviation) per 1 sec, for 20 MHz (10MHz x 2) Optional	<5x10^{-12} <2x10^{-12}
Frequency stability vs. load changes (±5%)	<±5x10^{-10}
Frequency stability vs. power supply changes (±5%)	<±5x10^{-10}
Warm-up time within accuracy of <±2x10^{-8}@ 25°C Optional, within accuracy of <±1x10^{-7}@ 25°C	<3 min <1 min

Vibrations:	
Frequency range	10-200 Hz
Acceleration	5 g

Shock:	
Acceleration	75 g
Duration	3±1 ms

Humidity @ 25 °C	98%
Storage temperature range	-55…+85 °C

Power supply (Us)	12V±5%	5V±5%
Steady state current consumption @ +25°C	<150 mA	<400 mA
Peak current consumption during warm- up (for "D" temp. range)	<400 mA	<1000 mA
Frequency pulling range	>±4.0x10^{-7}	
Control voltage range (Uin)	0…5 V	0…4.5V
Reference voltage (Uref)	+5 V	+4.5 V

Output	HCMOS		SIN
Level	"0"	<0.5V	>500 mV RMS
	"1"	>4.0V	
Load	10kOhm/30pF		50 Ohm±5%
Harmonics & sub harmonics	-		<-50 dBc
Jitter p-p, for 20 MHz	<100 ps		-

Additional notes:

- Please consult factory for daily aging values. Normally typical correspondence of daily to aging per year is as following: ±1x10^{-7}/year – ±1x10^{-9}/day; ±5x10^{-8}/year – ±5x10^{-10}/day; ±3x10^{-8}/year – ±3x10^{-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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Revision 5. February 2019