PRECISION LOW G-SENSITIVITY OCXO MV207

Features:

- *Low G-sensitivity – up to $0.5x10^{-9}$/g*
- *Long term stability – up to $\pm 2x10^{-8}$/year*
- *High stability vs. temperature – up to $\pm 7.5x10^{-10}$*
- *Power supply 5V and 12V*
- *Package height – down to 12.7 mm*
- *Frequency range: 5.0 – 20.0 MHz*
- *Low phase noise option available*

Power supply
12 V
5 V

Output
SIN
HCMOS**

Package type	
36x27x16 mm	B16
36x27x12.7 mm	B12.7

ORDERING GUIDE: MV207–C 3 F–12V–SIN–B12.7–LN–10.0 MHz

Availability of certain stability vs. operating temperature range (for 10 MHz)		±5x10⁻⁹	±3x10⁻⁹	±2x10⁻⁹	±1x10⁻⁹	±7.5x10⁻¹⁰
		5	3	2	1	075
A	0…+55ºC	A	A	A	A	A
B	-10…+60ºC	A	A	A	A	C
C	-20…+70ºC	A	A	A	A	NA
D	-40…+70ºC	A	A	A	A	NA
EX	-40…+85ºC	A	A	C	C	NA

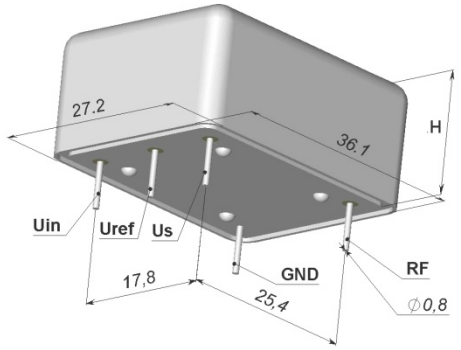
A – available, NA – not available, C – consult factory

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

Availability of certain aging values for certain frequencies		Standard frequencies					
		5.0 MHz	10.0 MHz	12.8 MHz	13.0 MHz	16.384 MHz	20.0 MHz
H	±2x10⁻⁷/year	NA	NA	NA	NA	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	C	NA	NA	NA

Phase noise, dBc/Hz, for 10MHz	-	LN
		For 12 V (SIN)
1 Hz	<-95	<-100
10 Hz	<-125	<-130
100 Hz	<-145	<-153
1000 Hz	<-150	<-158
10000 Hz	<-155	<-160

Package drawings:



For "H" definition please see package type

Vibrations:	
Frequency range	10-500 Hz
Acceleration	5 g

Shock:	
Acceleration	75 g
Duration	3ms±1

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

* - for the oscillators with the lower operating temperatures >-20º.

** only for package height 16 mm

Short term stability (Allan deviation) per 1 sec, for 10 MHz Optional	<5x10⁻¹² <2x10⁻¹²
G-sensitivity (in frequency range 0-500 Hz, for 10 MHz) Optional	<1.5x10⁻⁹/g <1x10⁻⁹/g <0,5x10⁻⁹/g
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 @ 25ºC	<5 min

Power supply (Us)	12V±5%	5V±5%
Steady state current consumption @ +25ºC	<150 mA	<400 mA
Peak current consumption during warm-up *	<400 mA	<1000 mA
Frequency pulling range (for 10 MHz)	>±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» «1»	<0.5 V >4.0 V	>300 mV RMS
Load	10 kOhm/30 pF		50 Ohm±5%
Harmonics	-		>30 dBc

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), ºC:**

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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