MINIATURE DOUBLE OVEN ULTRA PRECISION OCXO MV209

Features:

- ***Low sensitivity to rapid changes of ambient temperature***
- ***Stability vs. temperature – up to ±2x10^{-10}***
- ***Short term stability – up to 2x10^{-12} per 1 sec***
- ***Aging – up to ±2x10^{-8}/year***
- ***Standard CO-08 package with size of 36x27x19 mm***

ORDERING GUIDE: MV209 – B 05 E – 10.0 MHz- LN

Availability of certain stability vs. operating temperature		±5x10^{-10}	±3x10^{-10}	±2x10^{-10}
		05	03	02
A	0…+55 °C	A	A	A
B	- 10…+60 °C	A	A	C
C	- 20…+70 °C	A	C	C
D	- 40…+70 °C	C	C	C

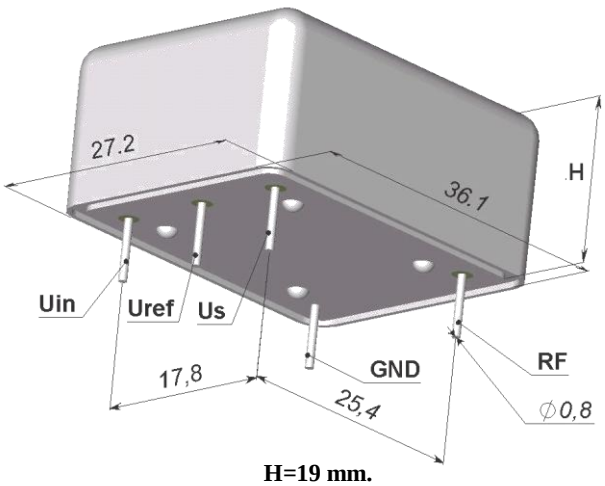
For other temperature ranges see designation at the end of Data Sheet

Availability of certain aging values for certain frequencies		Standard frequencies		
		5.0 MHz	8.192 MHz	10.0 MHz
F	±5x10^{-8}/year	A	A	A
E	±3x10^{-8}/year	A	A	C
D	±2x10^{-8}/year	A	C	C

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

Phase noise, dBc/Hz, for 10MHz	-	LN
1 Hz	<-95	<-100
10 Hz	<-125	<-130
100 Hz	<-143	<-148
1000 Hz	<-152	<-155
10000 Hz	<-158	<-160

Package drawing:



H=19 mm.

Short term stability (Allan deviation) per 1 sec, typical Optional:	<5x10^{-12} <2x10^{-12}
Frequency stability vs. load changes	<±1x10^{-10}
Frequency stability vs. power supply changes	<±1x10^{-10}
Warm-up time within accuracy of <±5x10^{-8} @25°C	<10 min
Power supply (Us)	12V±5%
Steady state current consumption @ 25°C (still air)	< 150 mA
Peak current consumption during warm-up @ 25°C	<700 mA
Frequency pulling range	>±4x10^{-7}
with external control voltage range (Uin)	0…+5 V
Reference voltage (Uref)	+5V

Vibrations: Frequency range Acceleration	 10-500 Hz 10g
Shock: Acceleration Duration	 150 g 3±1 ms
Storage temperature range	-55…+80 °C

Output	SIN
Level	> 400 mV
Load	50 Ohm±5%
Harmonic suppression	>30dBc

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.**
- **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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