SMALL SIZE ULTRA PRECISION TCXO WITH OCXO STABILITY MV203

Features:

- ***Small size: 36x27x10.5 mm***
- ***Frequency range: 9.8304 – 20.MHz***
- ***Standard frequencies: 9.8304, 10.0, 12.288, 12.8 MHz***
- ***Low current consumption: < 11 mA***
- ***12 V Power supply***
- ***Stability vs. temperature: up to ±5x10^{-8}***
- ***Aging: up to ±1.5x10^{-7}/year***

Option		S1	S2
Warm-up time within accuracy of <±2.5x10^{-7}		< 3 sec.	< 5 sec.
Phase noise, typical, dBc/Hz	10 Hz	<-90	-
	100 Hz	<-110	<-110
	1000 Hz	<-130	<-130
	10000 Hz	<-140	<-140

ORDERING GUIDE: MV203–B 300 H–10 MHz–S2

Availability of certain stability vs. operating temperature range		±2x10^{-7}	±1.5x10^{-7}	±1x10^{-7}	±7.5x10^{-8}	±5x10^{-8}
		200	150	100	75	50
A	0…+55ºC	A	A	A	A	C
B	-10…+60ºC	A	A	A	A	C
C	-20…+70ºC	A	A	A	C	C
D	-40…+70ºC	A	A	C	C	C

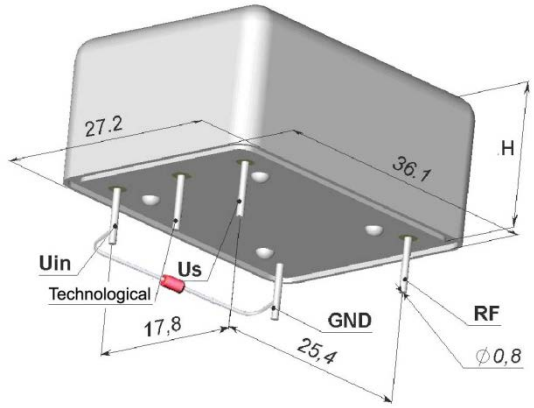
A – available, NA – not available, C – consult factory

Availability of certain aging values for certain frequencies			Standard frequencies	
			10.0 MHz	12.8 MHz
I	±3x10^{-7}/year	±3x10^{-9}/day	A	A
H	±2x10^{-7}/year	±2x10^{-9}/day	A	C
G	±1.5x10^{-7}/year	±1.5x10^{-9}/day	C	NA

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

Frequency stability vs. power supply changes	<±2.5x10^{-8}
Frequency stability vs. load changes	<±5x10^{-8}
Power supply (Us)	12V±10%
Steady state current consumption @ 25ºC	< 11 mA
Output	SIN
Level	350 ±150 mV RMS
Load	50 Ohm ±5%
Harmonic suppression	> 30 dB
Frequency pulling range	>±1,0x10^{-6}

Package drawing:



H= 10.5 mm

Pins Uin and GND are connected by technological resistor (18±6 kOhm) to adjust the frequency. This resistor can be removed in time of installation of the oscillator to an electronic device providing the same resistance between the pins Uin and GND.

Mechanical characteristics	
Vibrations:	
Frequency range	10-500 Hz
Acceleration	6 g
Shock:	
Acceleration	500 g/ (0,2…2) ms
Duration	100 g/ (1…5) ms

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

MORION, Inc.
13a, KIMa Ave., St.Petersburg, 199155, RUSSIA. http://www.morion.com.ru
Tel.:+7-812-350-9243; 332-5032. Fax:+7-812-350-7290. e-mail: sale@morion.com.ru

Revision 1. April 2012