DOUBLE OVEN ULTRA PRECISION OCXO MV360M

Features:

- *Ensures TIE of <400 nSec for 24 hours*
- *High stability vs. temperature: up to ±3x10^{-11}*
- *Standard frequency: 10.0 MHz*
- *Standard package: 50.8x50.8x19 mm*
- *High long-term stability: up to ±1x10^{-8}/year*
- *Power supply: 5 V and 12 V*
- *Analog or Digital frequency control*

Supply voltage
5 V
12 V

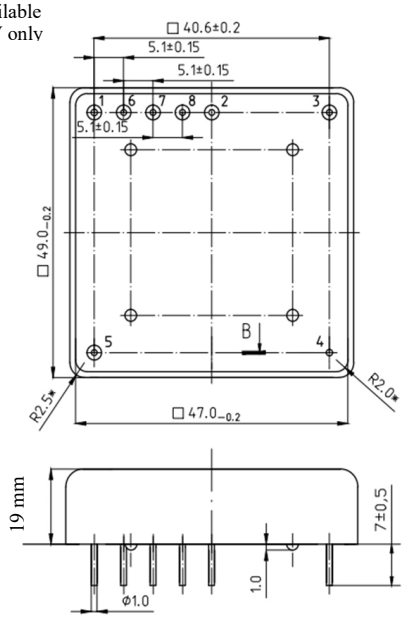
Type of frequency control	
-	Analog frequency control
D	Digital frequency control I²C
SPI	Digital frequency control SPI

ORDERING GUIDE: MV360M – C 003 D – 12V - 10.0M - D

Availability of certain stability vs. operating temperature range		± 1x10^{-10}	± 5x10^{-11}	± 3x10^{-11}
		01	005	003
A	0…+55°C	A	A	A
B	-10…+60°C	A	A	A
C	-20…+70°C	A	A	A
D	-40…+70°C	A	A	A
EU	-40…+75°C	A	A	A
EX*	-40…+85°C	A	A	A

A – available
* for 5V only

Availability of certain aging values for		10 MHz
F	±5x10^{-8}/year	A
E	±3x10^{-8}/year	A
D	±2x10^{-8}/year	A
C	±1x10^{-8}/year	A



Pin	Analog	D	SPI
1	Control voltage Input	SDA*	SDA
2	Reference voltage Output	SCL*	SCL
3	RF output	RF output	RF output
4	Ground (case)	Ground (case)	Ground (case)
5	Power supply	Power supply	Power supply
6	Ground for control voltage Input	Not used	Not used
7	Not used	Not used	CS*
8	Not used	Not used	LDAC*

* Inputs connected to UDAC via 10 kOhm

Phase noise, at offset, dBc/Hz, for 10MHz	-, D	SPI
1 Hz	<-100	<-95
10 Hz	<-130	<-125
100 Hz	<-150	<-150
1000 Hz	<-150	<-150
10000 Hz	<-155	<-155

Short term stability (Allan deviation) per 1 sec -, D	<2x10^{-12}	
For SPI	<5x10^{-12}	
Frequency stability vs. load changes (±5%)	<±1x10^{-11}	
Frequency stability vs. power supply changes (±5%)	<±1x10^{-11}	
Warm-up time within accuracy of <±5x10^{-8}@ 25°C	<15 min.	
Power supply (Us)	5V±5%	12V±5%
Digital frequency control by I2C protocol		
Frequency pulling range	≥±2,5x10^{-7}	
DAC type	LTC2606-1	
Chip address	0010000	
Analog frequency control		
Frequency pulling range	≥±2,5x10^{-7}	
with external control voltage range	0…4,1	0…5
Reference voltage output	+4,1 V	+5 V
Steady state current consumption @ +25°C	<800 mA	<300 mA
Peak current consumption during warm-up	<2 A	<1 A
Output	SIN	
Level	>300 mV RMS	
Load	50 Ohm±5%	
Harmonic suppression	>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

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

1750 Meridian Ave. #5128, San Jose, CA 95150
Tel: 408-329-8108, Email: sales@morion-us.com

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