ULTRA-LOW NOISY DUAL FREQUENCY OCXO MV359

Features:

- ***Output frequencies: 10.0 MHz and 100.0 MHz***
- ***Frequency stability: up to ±1E-9***
- ***Operating temperature range: -40…+80°C***
- ***Aging: up to <±1E-8/year***
- ***Output signal: SIN***
- ***Power supply: 12 V***
- ***Short term stability ADEV: <1E-12 at 1 s***
- ***Package: 67x44x18 mm***

ORDERING GUIDE: MV359–B 3 F–100.0 MHz–LN–5E-13

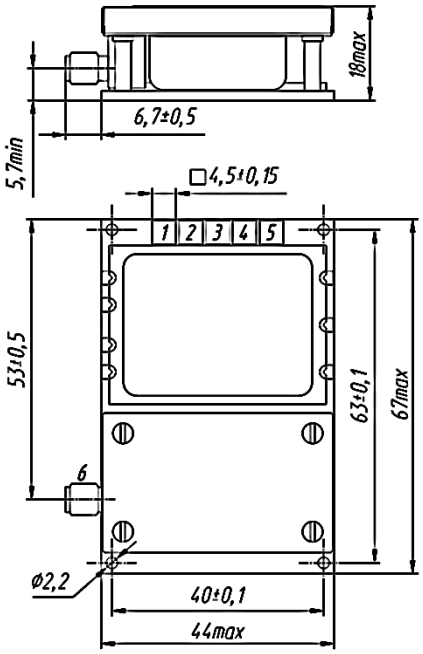
Availability of certain stability vs. operating temperature range		$\pm5x10^{-9}$	$\pm3x10^{-9}$	$\pm2x10^{-9}$	$\pm1x10^{-9}$
		5	3	2	1
A	0…+50ºC	+	+	+	+
B	-10…+60ºC	+	+	+	C
C	-20…+70ºC	+	+	C	C
D	-40…+70ºC	+	+	C	C
EW	-40…+80ºC	C	C	C	C

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

Phase noise, dBc/Hz (for frequencies, MHz)				
Option	- (by default)		LN	
Freq.	10	100	10	100
1 Hz	<-118	<-93	<-118	<-95
10 Hz	<-143	<-123	<-143	<-123
100 Hz	<-159	<-135	<-159	<-135
1 kHz	<-165	<-160	<-165	<-160
10 kHz	<-167	<-174	<-167	<-176
100 kHz	<-167	<-176	<-167	<-178

Aging	
F	$\pm5x10^{-8}$/year
E	$\pm3x10^{-8}$/year
D	$\pm2x10^{-8}$/year
C*	$\pm1x10^{-8}$/year

* C – consult factory



Pin	Function
1	Uref
2	Uin
3	VCC
4	RF OUT 10MHz
5	GND
6	RF OUT 100MHz (SMA)

Short term stability (Allan deviation) per 1 sec, for 10 MHz	$<1x10^{-12}$	-**
	$<5x10^{-13}$	5E-13
Frequency stability vs. load changes	$<\pm5x10^{-10}$	
Frequency stability vs. power supply changes	$<\pm5x10^{-10}$	
Warm-up time within accuracy of $<\pm1x10^{-7}$ @ 25 ºC	<5 min	
Power supply (U_s)	12V±5%	
Steady state current consumption @ 25ºC	< 420 mA	
Peak current consumption during warm-up	<900 mA	
Frequency pulling range (Positive slope)	$>\pm4x10^{-7}$	
with external control voltage range (U_{in})	0…+5 V	

** by default

Output	SIN
Level for 10MHz Level for 100 MHz	>4 dBm >8 dBm
Load	50 Ohm±5%
Harmonics	<-30 dBc
Vibrations	10-200 Hz, 3g
Shock	75g//3±1ms
Storage temperature range	-55…+85ºC
Package size	67x44x18 mm

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

Due to continuous development and improvement Morion, Inc. reserves the right to modify design or specifications of its products without prior notice.

Revision 4. July 2023