

# ULTRA PRECISION ULTRA SHORT-TERM STABILITY AND LOW PHASE NOISE OCXO MV336M

## Preliminary Information

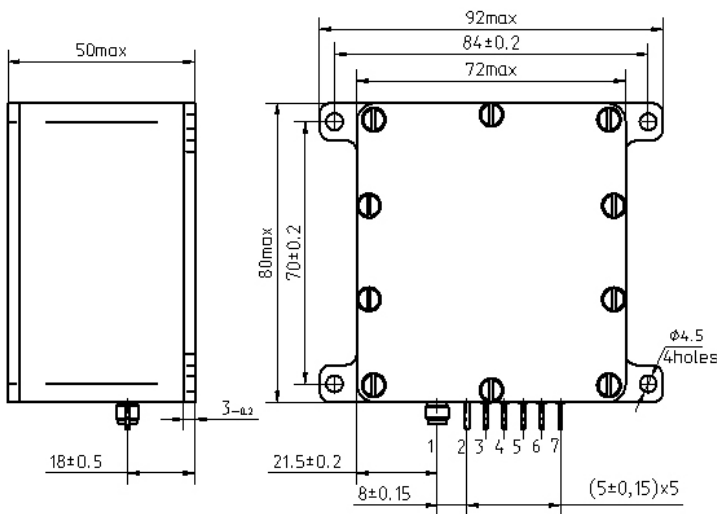
### Features:

- Standard frequency: 10.0 MHz
- Short term stability (Allan deviation):  $1,5 \times 10^{-13}$
- Stability vs. temperature:  $\pm 4 \times 10^{-11}$
- High long-term stability: up to  $\pm 1 \times 10^{-8}$ /year
- Ultra low phase noise level close to the carrier
- Power supply: 12 V
- Available SPI interface
- Available as RoHS

Availability of certain stability vs. operating temperature range		$\pm 5 \times 10^{-11}$	$\pm 4 \times 10^{-11}$
		5E-11	4E-11
JQ	0...+55°C	A	A
JR	0...+60°C	C	C
HT	-10...+70°C	C	C

A – Available; C – Consult factory.

## ORDERING GUIDE: MV336M – JQ/4E-11 – D – 10,0M – LN



Availability of certain aging values for certain	
F	$\pm 5 \times 10^{-8}$ /year
E	$\pm 3 \times 10^{-8}$ /year
D	$\pm 2 \times 10^{-8}$ /year
C	$\pm 1 \times 10^{-8}$ /year

Phase noise, dBc/Hz:	-	LN	ULN
0,1 Hz	<-80	<-85	<-92
1 Hz	<-113	<-116	≤-119...-120
10 Hz	<-143	≤-144	≤-145
100 Hz	<-154	<-156	<-157
1000 Hz	<-160	<-160	<-160
10000 Hz	<-160	<-160	<-160

Pin	Function
1	Output signal (SMA)
2	Ground (case)
3	Not used
4	SCLK
5	DIN
6	CS
7	Power supply

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

Short term stability (Allan deviation) per 1 sec.	$\pm 1,5 \times 10^{-13}$
Frequency stability vs. load changes ( $\pm 5\%$ )	$< \pm 2 \times 10^{-11}$
Frequency stability vs. power supply changes ( $\pm 1\%$ )	$< \pm 2 \times 10^{-11}$
Warm-up time within accuracy of $< \pm 5 \times 10^{-8}$ @ 25°C	<14 min.
Frequency pulling range	$\pm 1,5 \times 10^{-7}$
Power supply (Us)	12 V $\pm 1\%$
Steady state current consumption @ +25°C ("still air")	<400 mA*
Peak current consumption during warm-up	<1300 mA
Output	SIN
Level	$\geq +4$ dBm
Load	50 Ohm $\pm 5\%$
Harmonics	$\geq 30$ dBc

\* for 0...55°C operating temperature range only.

### 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