

HIGH FREQUENCY PRECISION LOW PHASE NOISE OCXO MV136

Features:

- Frequency range: 48.0 – 120.0 MHz
- Low Phase Noise: floor of <-165 dBc/Hz
- Small size package: 36x27x16 mm
Ideal for PLL, VSAT, Frequency synthesizers

Frequency range: 48.0–120.0 MHz
Standard Frequencies: 48.0; 56.0;
60.0; 80.0; 100.0 MHz

Power Supply

5 V
12 V

ORDERING GUIDE: **MV136-B 300 J-5V-B16-3-100.0 MHz**

Availability of certain stability vs. operating temperature range		±5x10 ⁻⁷	±3x10 ⁻⁷	±1x10 ⁻⁷	±7.5x10 ⁻⁸	±5x10 ⁻⁸
		500	300	100	75	50
A	0...+50°C	A	A	A	A	A
B	-10...+60°C	A	A	A	A	A
C	-20...+70°C	A	A	A	A	A
D	-40...+70°C	A	A	A	A	C
BT	-55...+70°C*	A	A	C	C	NA
BX	-55...+85°C*	A	C	C	NA	NA

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

*only for 12 V

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

Phase noise dBc/Hz (typical for 100 MHz, 12 V power supply)					
	1	2	3	4	5
10 Hz	-85	-90	-95	-98	-100
100 Hz	-115	-120	-125	-128	-130
1000 Hz	-140	-145	-150	-150	-152
10000 Hz	-160	-162	-165*	-165*	-165*

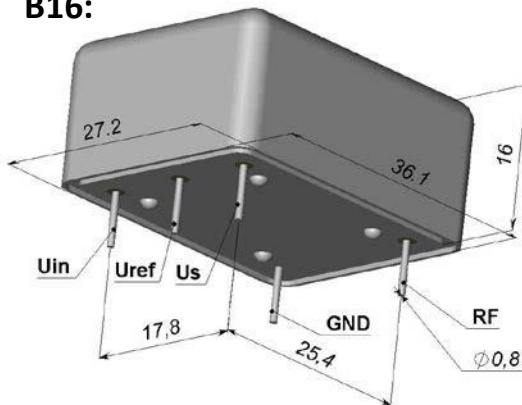
*-162 dBc/Hz for 5V only

Aging

K	±1x10 ⁻⁶ /year
J	±5x10 ⁻⁷ /year
I	±3x10 ⁻⁷ /year
H	±2x10 ⁻⁷ /year
G	±1x10 ⁻⁷ /year

Package drawing:

B16:



Frequency stability vs. load changes	<±5x10 ⁻⁸	
Frequency stability vs. power supply changes	<±1x10 ⁻⁷	
Warm-up time within accuracy of <±1x10 ⁻⁶ @ 25°C	<2 min	
Power supply (Us)	5V±10%	12V±10%
Steady state current consumption @ 25°C	< 300 mA	< 150 mA
Peak current consumption during warm-up	< 950 mA	<500 mA
Frequency pulling range	>±3x10 ⁻⁶	
with external control voltage range (Uin)	0...+4 V	0...+8 V
Reference voltage output (Uref)	+4V	+8 V

Output	SIN
Level	>400 mV
Load	50 Ohm±10%
Harmonics	<-25 dBc
Vibration	10-500 Hz, 5g
Storage temperature range	-55...+80 °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



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

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