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		$\pm5x10^{-7}$	$\pm3x10^{-7}$	$\pm1x10^{-7}$	$\pm7.5x10^{-8}$	$\pm5x10^{-8}$
		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	C
D	-40…+70 °C	A	A	A	C	NA

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

-55 °C lower temperature limit and +75 °C, +80 °C, +85 °C upper temperature limits may be available on a separate request. 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

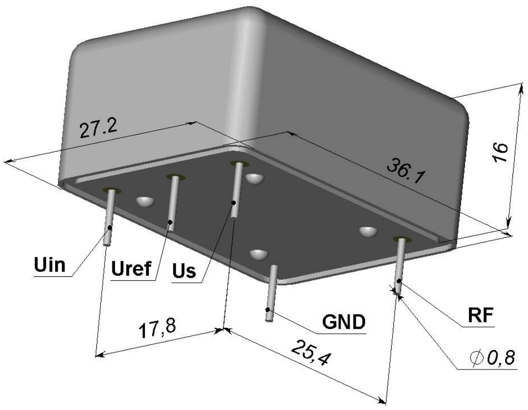
Package	
B16	27x36x16 mm
M16*	36x36x16 mm (preliminary)

* Pin configuration to be advised by manufacturer upon request

Aging	
K	$\pm1x10^{-6}$/year
J	$\pm5x10^{-7}$/year
I	$\pm3x10^{-7}$/year

Package drawing:

B16:



Frequency stability vs. load changes	$<\pm5x10^{-8}$	
Frequency stability vs. power supply changes	$<\pm1x10^{-7}$	
Warm-up time within accuracy of $<\pm1x10^{-6}$ @ 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	$>\pm3x10^{-6}$	
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
Vibrations	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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