HIGH FREQUENCY LOW PHASE NOISE OCXO MV87

Features:

- ***Frequency range: 48.0-120.0 MHz without internal multiplication***
- ***Low phase noise: floor of <-167 dBc/Hz***
- ***High stability vs. temperature: up to ±5x10^{-8}***
- ***Low harmonics and sub-harmonics (optional)***
- ***SMA output (optional)***
- ***Low profile – just 12.7 mm height***
- ***Ideal for PLL, VSAT, Frequency synthesizers***

Frequency range: 48.0- 500.0 MHz
Standard Frequency: 48.0; 56.0; 60.0; 80.0; 100.0; 400.0; 500.0 MHz

Package type	
50.8x50.8x12.7 mm	
F	48.0 … 120.0 MHz
G	100 … 500.0 MHz

ORDERING GUIDE: MV87–B 300 J–3–100.0 MHz–F

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 ºC	A	A	A	A	A
B	- 10…+60 ºC	A	A	A	A	C
C	- 20…+70 ºC	A	A	A	C	NA
D	- 40…+70 ºC	A	A	A	C	NA

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

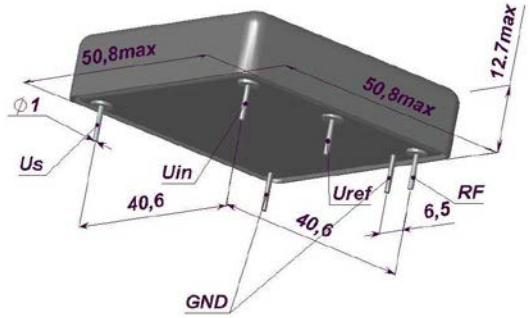
+75°, +80°, +85°C upper temperature limits may be available on a separate request. For other temperature ranges see designation at the end of Data Sheet

Phase noise, dBc/Hz
(for 100.0 & 500.0 MHz)

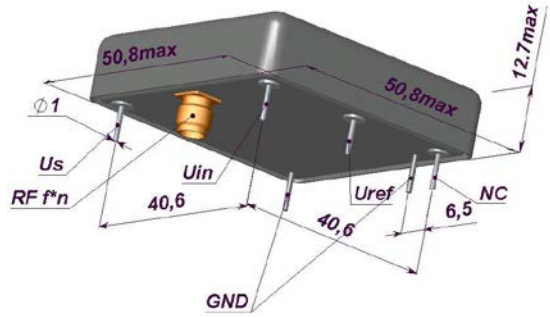
Option	1		2		3		4	5	6
Freq.	100	500	100	500	100	500	100	100	100
10 Hz	-85	-70	-90	-75	-95	-80	-98	-100	-100
100 Hz	-115	-100	-120	-105	-125	-110	-128	-130	-130
1000 Hz	-140	-125	-145	-130	-150	-135	-150	-152	-155
10000 Hz	-160	-140	-162	-142	-165	-145	-165	-165	-167

Aging	
J	±5x10^{-7}/year
I	±3x10^{-7}/year
H	±2x10^{-7}/year
G	±1x10^{-7}/year

Package drawings:



F



G

Frequency stability vs. load changes	< ±5x10^{-8}
Frequency stability vs. power supply changes	< ±5x10^{-8}
Warm-up time with accuracy of <±2x10^{-7} at +25 °C	< 5 min
Power supply (Us)	12V±10%
Steady state current consumption @ 25ºC (still air)	< 150 mA
Peak current consumption during warm-up	< 450 mA
Frequency pulling range	> ±3x10^{-6}
with external control voltage range (Uin)	0…+8 V
Reference voltage (Uref)	+8 V

Output	SIN
Level	> 400 mV RMS
Load	50 Ohm±10%
Harmonics & sub harmonics	< -25 dBc (< -40 dBc optional and available for Package Type G)
Vibrations	10-500 Hz, 5g
Storage temperature range	-55…+80 ºC

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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