

HIGH FREQUENCY LOW PHASE NOISE OCXO MV318

Features:

- Frequency range: 48.0-125.0 MHz
- Ultra low phase noise – <-180 dBc/Hz @ 100 kHz offset
- High stability vs. temperature – up to $\pm 5 \times 10^{-8}$
- Low profile – just 12.7 mm height
- Ideal for PLL, VSAT, Frequency synthesizers

Frequency range: 48.0- 125.0 MHz
Standard Frequency: 48.0; 56.0; 60.0; 80.0; 100.0 MHz

ORDERING GUIDE: MV318-B 300 J-3-100.0 MHz

Availability of certain stability vs. operating temperature range		$\pm 5 \times 10^{-7}$	$\pm 3 \times 10^{-7}$	$\pm 1 \times 10^{-7}$	$\pm 7.5 \times 10^{-8}$	$\pm 5 \times 10^{-8}$
		500	300	100	75	50
A	0...+50 °C	A	A	A	A	A
B	-10...+60 °C	A	A	A	A	C
C	-20...+70 °C	A	A	A	C	NA
D	-40...+70 °C	A	A	A	C	NA
EX	-40...+85 °C	A	A	C	NA	NA

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

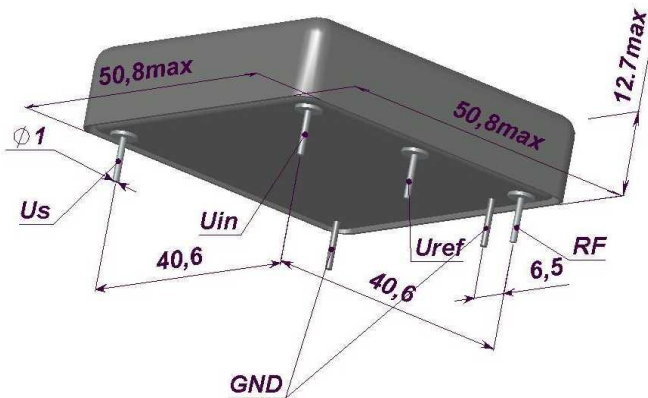
For other temperature ranges see designation at the end of Data Sheet

Phase noise, dBc/Hz, for 100.0 MHz				
Option	1	2	3	4
10 Hz	<-95	<-97	<-97	<-100
100 Hz	<-127	<-128	<-128	<-133...135
1000 Hz	<-153	<-155	<-156	<-157...160
10000 Hz	<-172	<-173	<-175	<-176...177
100000 Hz	<-176	<-176	<-178	<-180

Aging	
J	$\pm 5 \times 10^{-7}$ /year
I	$\pm 3 \times 10^{-7}$ /year
H	$\pm 2 \times 10^{-7}$ /year
G	$\pm 1 \times 10^{-7}$ /year

Frequency stability vs. load changes	$< \pm 5 \times 10^{-8}$
Frequency stability vs. power supply changes	$< \pm 5 \times 10^{-8}$
Warm-up time with accuracy of $< \pm 2 \times 10^{-7}$ at +25 °C	< 3 min
Power supply (Us)	12V \pm 10%
Steady state current consumption @ 25°C (still air)	< 190 mA
Peak current consumption during warm-up	< 450 mA
Frequency pulling range with external control voltage range (Uin)	$> \pm 2.5 \times 10^{-6}$
Reference voltage (Uref)	+8 V

Package drawing:



Output	SIN
Level	> 600 mV RMS
Load	50 Ohm \pm 10%
Harmonics & subharmonics	< -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