

# MINIATURE HIGH FREQUENCY LOW PHASE NOISE VOLTAGE CONTROLLED CRYSTAL OSCILLATOR MV217

## Features:

- Small package size 20x20x10 mm
- Frequency range: 80.0 – 170.0 MHz
- Low Phase Noise

## ORDERING GUIDE: MV217-A 8000 - 2 - 100.0 MHz

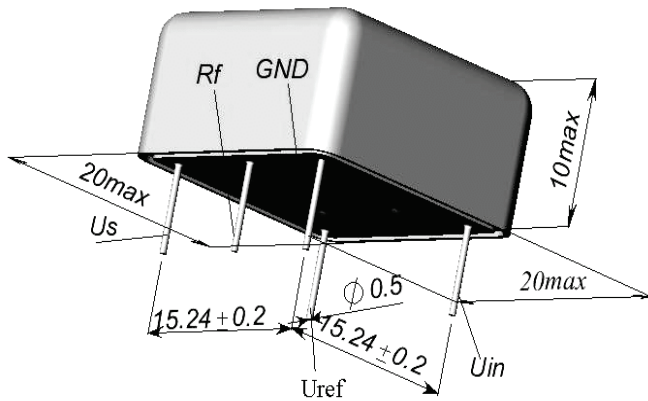
Availability of certain stability vs. operating temperature		$\pm 10 \times 10^{-6}$	$\pm 8 \times 10^{-6}$
		10000	8000
A	0...+55 °C	A	A
B	-10...+60 °C	A	A

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

Frequency range: 80-170.0 MHz

Phase noise, dBc/Hz (for 100 MHz)			
	1	2	3
100 Hz	-95	-105	-110
1 kHz	-125	-130	-135
10 kHz	-140	-145	-150
100 kHz-1MHz	-155	-160	-160

## Package drawing:



Long term stability (aging) per 1 <sup>st</sup> year	$< \pm 2 \times 10^{-6}$
Long term stability (aging) per 10 years	$< \pm 10 \times 10^{-6}$
Overall stability during whole lifetime (including all factors)	$< \pm 20 \times 10^{-6}$
Frequency stability vs. power supply changes by $\pm 5\%$	$< \pm 2 \times 10^{-6}$
Frequency stability vs. load changes by $\pm 10\%$	$< \pm 5 \times 10^{-7}$
Power supply (Us)	5V $\pm 5\%$
Current consumption	< 30 mA
Output	SIN
Load	50 Ohm
Level	>300 mV
Frequency pulling range	$> \pm 22 \times 10^{-6}$
with external voltage range (Uin)	0...+4 V
Harmonic suppression	>30 dBc
Reference voltage output (Uref)	+ 4 V

Vibrations:	
Frequency range	5-300 Hz
Acceleration	5g

Shock:	
Acceleration	15 g
Duration	6 ms
Storage temperature range	-60...+90 °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