

MINIATURE HIGH FREQUENCY LOW PHASE NOISE VOLTAGE CONTROLLED CRYSTAL OSCILLATOR MV217

Features:

- Small package size: 20.35x20.35x10.5 mm
- Frequency range: 80.0 – 170.0 MHz
- Low Phase Noise

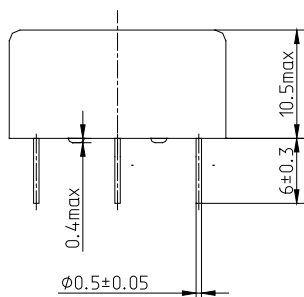
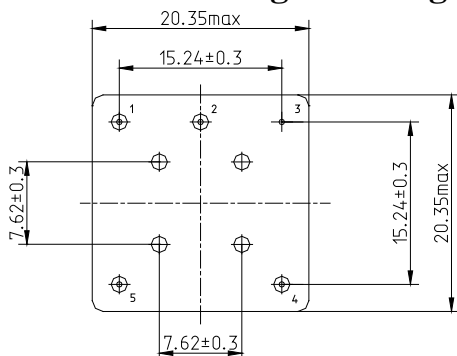
Frequency range: 80.0 – 170.0 MHz

ORDERING GUIDE: MV217-A-2-100.0 MHz

Operating temperature range		Availability of certain stability vs. operating temperature	Phase noise	Frequency pulling range
A	0...+55°C	$\pm 8 \times 10^{-6}$	1, 2, 3, 4	$\pm 22 \times 10^{-6}$
B	-20...+60°C	$\pm 15 \times 10^{-6}$	1, 2, 3	$\pm 30 \times 10^{-6}$
C	-40...+70°C	$\pm 25 \times 10^{-6}$	1, 2	$\pm 40 \times 10^{-6}$
D	-40...+85°C	$\pm 25 \times 10^{-6}$	1, 2	$\pm 40 \times 10^{-6}$

Phase noise, dBc/Hz (for 100 MHz)				
	1	2	3	4
100 Hz	-95	-105	-110	-110
1 kHz	-125	-130	-135	-140
10 kHz	-140	-145	-150	-155
100 kHz-1MHz	-155	-160	-160	-160

Package drawing:



1	Us
2	RF
3	GND
4	Uin
5	Uref

Frequency stability vs. power supply changes by ±5%	$< \pm 2 \times 10^{-6}$
Frequency stability vs. load changes by ±10%	$< \pm 0.5 \times 10^{-6}$
Power supply (Us)	5V±5%
Current consumption	< 30 mA
Output	SIN
Load	50 Ohm
Level	>300 mV RMS
With external voltage range (Uin)	0...+4.5 V
Reference voltage output (Uref)	4...+4.5 V
Harmonic suppression	>25 dBc

Vibrations:	
Frequency range	10-2000 Hz
Acceleration	10g

Shock:	
Acceleration	100 g
Duration	0.1-2 ms
Storage temperature range	-60...+85°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