

# HIGH STABILITY WIDE TEMPERATURE RANGE SMALL SIZE TCXO (VCTCXO) MV392

## Preliminary information

### Features:

- Ultra-wide temperature range from -55 °C to +125°C
- Frequency range: 8.0 – 52.0 MHz
- SMD miniature package

Package size, mm	
7.0 x 5.0 x 2.0	75
5.0 x 3.2 x 1.7	53

**ORDERING GUIDE: MV392-TCXO – EX500 – 20.0MHz – Sin – 3.3 – 75 – C2**

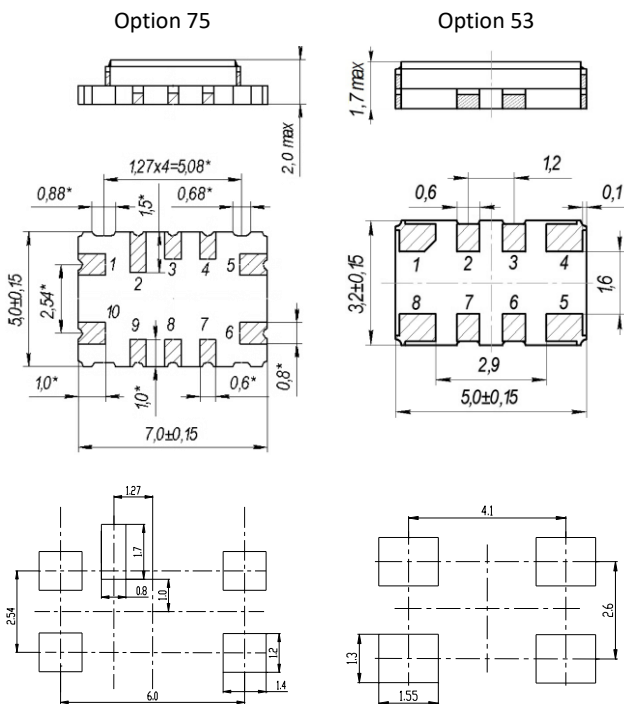
	VCTCXO	TCXO
Frequency pulling range	$\geq \pm 5.0 \times 10^{-6}$	–
Setting accuracy	$\leq \pm 1.0 \times 10^{-6}$	

Availability of certain stability vs. operating temperature range for 20 MHz	$\pm 2 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 0.5 \times 10^{-6}$
	2000	1000	500
EX -40...+85°C	A	A*	A*
BX -55...+85°C	A	A*	C
EZ -40...+125°C	A	C	C
BZ -55...+125°C	A	C	C

Power supply	
3V	3
3.3V	3.3

A – available, NA – not available,  
C – consult factory  
\* not available for VC-TCXO

Output type	Clipped Sin	HCMOS
Consumption	<5 mA	<7 mA
Level	> 0.8 V (ampl. value)	$U_H > 0.8 U_s$ $U_L < 0.2 U_s$
Load	10 kOhm 10 pF	- 10 pF



Power supply $U_s$ , V	Control voltage $U_{in}$ , V		
	Value for which $f=f_{nom}$	Range	Designation
3.0±5%	1.5	0.5-2.5	B1
	1.65	0.65-2.65	B2
3.3±5%	1.5	0.5-2.5	C1
	1.65	0.65-2.65	C2

Pinout:			
Contact		TCXO	VCTCXO
75	53		
#1	#1	Not in use	$U_{in}$
#2, 3, 4	#2, 3	Not in use	
#5	#4	GND	
#6	#5	RF	
#7, 8	#6	Not in use	
#9	#7	Not in use	
#10	#8	$U_s$	

Frequency vs. supply voltage changes ±5%	$\pm 0.4 \times 10^{-6}$	
Frequency stability vs. load changes ±5%	$\pm 0.2 \times 10^{-6}$	
Aging/year	$\pm 1 \times 10^{-6}$	
Power spectral density of phase noise at offset, for 20 MHz, dB/Hz	100 Hz	-113
	1 kHz	-133
	10 kHz	-146

### 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	Z
-60	-55	-50	-45	-40	-30	-20	-10	0	+10	+30	+40	+45	+50	+55	+60	+65	+70	+75	+80	+85	+125

