

# LOW POWER CONSUMPTION TCXO MV88

## Features:

- Excellent frequency stability vs. temperature
- Wide operating temperature range
- Frequency range 9.6-20.0 MHz

Output type
SIN
HCMOS

## ORDERING GUIDE: MV88 – B – 1000 – K – HCMOS – 10.0 MHz

Availability of certain stability vs. operating temperature range		$\pm 2 \times 10^{-6}$	$\pm 1 \times 10^{-6}$	$\pm 5 \times 10^{-7}$
		2000	1000	500
A	0...+55 °C	A	A*	A*
B	-10...+60 °C	A	A*	A*
C	-20...+70 °C	A	A*	C
D	-40...+70 °C	A	A*	C

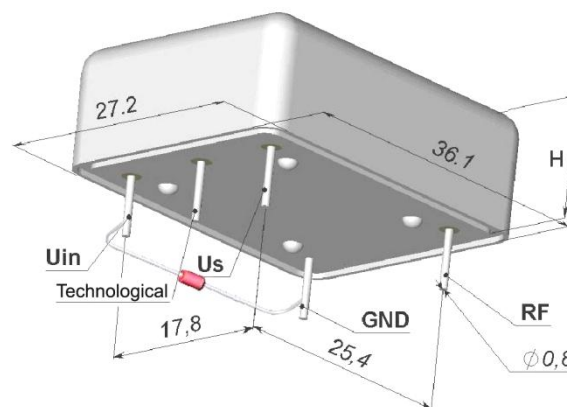
For other temperature ranges see designation at the end of Data Sheet

\* for 10 MHz

Availability of certain aging values for certain frequencies		Standard frequencies		
		10.0 MHz	12.8 MHz	20.0 MHz
L	$\pm 2 \times 10^{-6}$ /year	A	A	A
K	$\pm 1 \times 10^{-6}$ /year	A	C	NA

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

## Package drawing:



H=10.1 mm

\* for 20 MHz package height is 8.2 mm max

Pins Uin and GND are connected by technological resistor (18±6 kOhm) to adjust the frequency. This resistor can be removed in time of installation of the oscillator to an electronic device providing the same resistance between the pins Uin and GND.

Frequency stability vs. load changes	$< \pm 2 \times 10^{-7}$
Frequency stability vs. power supply changes	$< \pm 2 \times 10^{-7}$
Power supply (Us)	12V±25%
Current consumption	SIN
	HCMOS
	<4 mA    <7 mA
Frequency pulling range	$> \pm 3.5 \times 10^{-6}$
Storage temperature range	-50...+70 °C
Vibrations	1...500 Hz, 10 g
Shock	500 g, 0.5-2 ms

Output type	SIN	HCMOS
Level	325±100 mV	≤ 0,4 ; ≥ 4,0 V
Load	50 Ohm	
Phase noise at offset (for 10.0 MHz), dBc/Hz:		
1 Hz	-60	-55
10 Hz	-90	-85
100 Hz	-115	-110
1000 Hz	-135	-125
10000 Hz	-140	-130

## 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