



PIN	CONNECTION
1	Freq adjustment
7	Ground
8	Output
14	Supply

Scale 1:1

## Features

- ▶ **Compact 14-pin DIL package**
- ▶ **5.0V supply voltage**
- ▶ **Sinewave output**
- ▶ **Very fast warmup**
- ▶ **Low power consumption**
- ▶ **Wide temperature range available**

## Standard Frequencies

Frequencies in MHz	
10.00000	16.38400
12.80000	19.44000
16.00000	20.00000

## Specifications

Parameters	Product	Option Codes
	MCOXOVS	
<b>Frequency range:</b> 10.0 ~ 20.0MHz	■	
<b>Frequency stability:</b> ±0.7ppm max first year ±4ppm max in 10 years ±0.1ppm over $V_{DD} \pm 0.2V$ ±0.01ppm over 10% change in load	■ ■ ■ ■	
<b>Short term stability:</b> $5 \times 10^{-10}$ , 0.1 to 30s $5 \times 10^{-11}$ over 1s typ	■ ■	
<b>Temperature stability:</b> ±0.075ppm max, 0 to +60°C ±0.15ppm max, -20 to +70°C ±0.25ppm max, -40 to +85°C	□ □ □	A B C
<b>Operable temperature range:</b> -40 to +85°C	■	
<b>Storage temperature range:</b> -65 to +125°C	■	
<b>Output waveform:</b> Clipped sine, 1 ~ 2V p-p Harmonics -10dBc Spurious -70dBc	■ ■ ■	
<b>Test load:</b> 1 k $\Omega$ // 5pF ( $\pm 10\%$ )	■	
<b>Frequency adjustment:</b> Control voltage (pin 1) ±4ppm min, 0.5V ~ 5.0V Variable resistor (pins 1 to 7) ±4ppm min, 0 ~ 10k $\Omega$	□ □	V5 R1
<b>Supply voltage (<math>V_{DD}</math>):</b> +5.0V ( $\pm 0.2V$ )	■	
<b>Input current:</b> 70mA max @ +30°C 110mA max @ -20°C	■ ■	
<b>Warm up:</b> within spec after 30s @ 0°C current 250mA max during 10s	■ ■	
<b>Phase noise (typ @ 10MHz):</b> -80dBc/Hz @ 1Hz -110dBc/Hz @ 10Hz -135dBc/Hz @ 100Hz -145dBc/Hz @ 1kHz	■ ■ ■ ■	
<b>Shock &amp; vibration:</b> 2,000G, 0.3ms ½-sine 10.0 ~ 2,000Hz, 10G	■ ■	

■ Standard. □ Optional - Please specify required code(s) when ordering

## Ordering Information

Product name + model code (if standard) + frequency

eg: **MCOXOVS-AR1 10.0MHz**

**MCOXOVS-BV5 16.384MHz**

Option code X (eg MCOXOVS/X) denotes a custom spec.

◆ Other combinations of calibration and temperature stability/range are available.