



| 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 | |
| Frequency range: 10.0 ~ 20.0MHz (20.1~40.0MHz under development) | ■ | |
| Frequency stability: ±0.7ppm max first year ±4ppm max in 10 years ±0.1ppm over V_{DD} ±0.2V ±0.01ppm over load min to max | ■ ■ ■ ■ | |
| Short term stability: 5x10 ⁻¹⁰ , 0.1 to 30s 5x10 ⁻¹¹ over 1s typ | ■ ■ | |
| Temperature stability: ±0.075ppm max, 0 to +60°C ±0.15ppm max, -20 to +70°C ±0.25ppm max, -40 to +85°C | □ □ □ | A B C |
| Operable temperature range: -40 to +85°C | ■ | |
| Storage temperature range: -65 to +125°C | ■ | |
| Output waveform: Clipped sine, 1 ~ 2V p-p Harmonics -10dBc max Spurious -70dBc max | ■ ■ ■ | |
| Test load: 1 kΩ // 5pF (±10%) | ■ | |
| Frequency adjustment: Control voltage (pin 1) ±4ppm min, 0.5V ~ 5.0V Variable resistor (pins 1 to 7) ±4ppm min, 0 ~ 10kΩ | □ □ | V5 R1 |
| Supply voltage (V_{DD}): +5.0V (±0.2V) | ■ | |
| Input current: 70mA max @ +30°C 110mA max @ -20°C | ■ ■ | |
| Warm up: within spec after 30s @ 0°C current 250mA max during 10s | ■ ■ | |
| Phase noise: < -80dBc/Hz @ 1Hz < -110dBc/Hz @ 10Hz < -135dBc/Hz @ 100Hz < -145dBc/Hz @ 1kHz | ■ ■ ■ ■ | |
| Shock & vibration: 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.