



## Features

- ▶ Temperature stability down to 5ppb
- ▶ Single 12V supply (15V or 18V optional)
- ▶ Compact package
- ▶ Standard European IEC CO-08 pin-out
- ▶ Custom options available

## Standard Models

The table shows the most common models. In most cases selecting one of these models will ensure the best combination of price / performance and availability.

Freq	Specification	Ageing per day	Temperature stability	Part No
5.0MHz	HCD360/DPFN	$\pm 1 \times 10^{-9}$	$\pm 2 \times 10^{-8}$ -20+70°C	MS06935
5.0MHz	HCD360/ERFN	$\pm 5 \times 10^{-10}$	$\pm 1 \times 10^{-8}$ -20+70°C	MS06936
10.0MHz	HCD360/DPFN	$\pm 1 \times 10^{-9}$	$\pm 2 \times 10^{-8}$ -20+70°C	MS06933
10.0MHz	HCD360/ERFN	$\pm 5 \times 10^{-10}$	$\pm 1 \times 10^{-8}$ -20+70°C	MS06522

## Specifications

Parameters	Product	Option Codes
	HCD360	
Frequency range:	5.0 ~ 20.0MHz	■
Ageing per day (at despatch):	$< \pm 1 \times 10^{-9}$ □ $< \pm 5 \times 10^{-10}$ ■ $< \pm 2 \times 10^{-10}$ □	D E F
Frequency stability:	$< \pm 5 \times 10^{-8}$ per year ■ $< \pm 1 \times 10^{-9}$ per 10% change in $V_{DD}$ ■	
Short term stability:	$< \pm 1 \times 10^{-11}$ over 1 sec	■
Temperature stability:	$< \pm 2 \times 10^{-8}$ □ $< \pm 1 \times 10^{-8}$ ■ $< \pm 5 \times 10^{-9}$ □	P R S
Operating temperature range:	0 to +50°C □ -10 to +60°C □ -20 to +70°C ■ -40 to +70°C □	A C F G
Storage temperature range:	-40 to +90°C	■
Output waveform:	Sine wave, 7dBm ( $\pm 2$ dBm) into 50Ω	■
Frequency adjustment:	$\pm 5 \times 10^{-7}$ (typ) over +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided	■
Supply voltage ( $V_{DD}$ ):	+12V ( $\pm 0.5$ V) ■ +15V ( $\pm 0.5$ V) □ +18V ( $\pm 0.5$ V) □	N P R
Power consumption:	5.0W max at switch on ■ 1.2W typ when stabilised at 25°C ■	
Warm up:	$< \pm 1 \times 10^{-8}$ after 10mins at +20°C	■
Phase noise (@ 10.0MHz):	$< -125$ dBc/Hz @ 10Hz ■ $< -135$ dBc/Hz @ 100Hz ■ $< -150$ dBc/Hz @ 1kHz ■ $< -155$ dBc/Hz @ 10kHz ■ $< -155$ dBc/Hz @ 50kHz ■	
Harmonics:	$< -30$ dB wrt carrier	■
Shock:	IEC 68-2-27 Test Ea 50G for 11ms	■
Vibration:	IEC 68-2-06 Test Fc 10-55Hz, 1.5mm. 55-500Hz, 10G	■

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

## Ordering Information

Part No, or product name + option codes + frequency  
 eg: **HCD360/DPFN 10.0MHz**  
**HCD360/ERFN 5.0MHz**

Option code X (eg HCD360/X) denotes a custom specification.