



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 (± 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 (± 0.5 V) +15V (± 0.5 V) +18V (± 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.