



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): $< \pm 1 \times 10^{-9}$ $< \pm 5 \times 10^{-10}$ $< \pm 2 \times 10^{-10}$ | <input type="checkbox"/> ■ <input type="checkbox"/> | 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: $< \pm 2 \times 10^{-8}$ $< \pm 1 \times 10^{-8}$ $< \pm 5 \times 10^{-9}$ | <input type="checkbox"/> ■ <input type="checkbox"/> | P R S |
| Operating temperature range: 0 to +50°C -10 to +60°C -20 to +70°C -40 to +70°C | <input type="checkbox"/> <input type="checkbox"/> ■ <input type="checkbox"/> | 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) | ■ <input type="checkbox"/> <input type="checkbox"/> | 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.