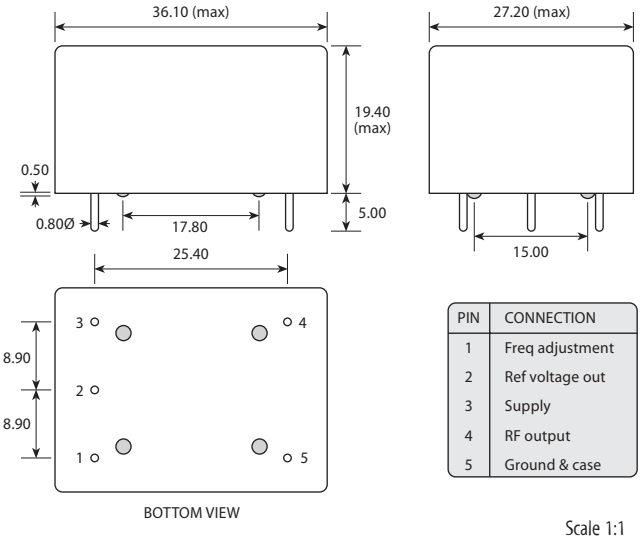
# OCXO HCMOS Output

# HCD361




| PIN | CONNECTION |
|---|---|
| 1 | Freq adjustment |
| 2 | Ref voltage out |
| 3 | Supply |
| 4 | RF output |
| 5 | Ground & case |

Scale 1:1

## 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 | HCD361/DPFN | $\pm1x10^{-9}$ | $\pm2x10^{-8}$ -20+70°C | MS06942 |
| 5.0MHz | HCD361/ERFN | $\pm5x10^{-10}$ | $\pm1x10^{-8}$ -20+70°C | MS06944 |
| 10.0MHz | HCD361/DPFN | $\pm1x10^{-9}$ | $\pm2x10^{-8}$ -20+70°C | MS06941 |
| 10.0MHz | HCD361/ERFN | $\pm5x10^{-10}$ | $\pm1x10^{-8}$ -20+70°C | MS06943 |

## Specifications

| Parameters | Product HCD361 | Option Codes |
|---|---|---|
| **Frequency range:** 5.0 ~ 20.0MHz | ■ | |
| **Ageing per day (at despatch):** | | |
| $< \pm1x10^{-9}$ | □ | D |
| $< \pm5x10^{-10}$ | ■ | E |
| $< \pm2x10^{-10}$ | □ | F |
| **Frequency stability:** | | |
| $< \pm5x10^{-8}$ per year | ■ | |
| $< \pm1x10^{-9}$ per 10% change in $V_{DD}$ | ■ | |
| **Short term stability:** | | |
| $< \pm1x10^{-11}$ over 1 sec | ■ | |
| **Temperature stability:** $< \pm2x10^{-8}$ | □ | P |
| $< \pm1x10^{-8}$ | ■ | R |
| $< \pm5x10^{-9}$ | □ | S |
| **Operating temperature range:** | | |
| 0 to +50°C | □ | A |
| -10 to +60°C | □ | C |
| -20 to +70°C | ■ | F |
| **Storage temperature range:** | | |
| -40 to +90°C | ■ | |
| **Output waveform:** | | |
| HCMOS / TTL compatible | ■ | |
| **Frequency adjustment:** | | |
| $\pm5x10^{-7}$ (typ) over +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided | ■ | |
| **Supply voltage ($V_{DD}$):** | | |
| +12V (±0.5V) | ■ | N |
| +15V (±0.5V) | □ | P |
| +18V (±0.5V) | □ | R |
| **Power consumption:** | | |
| 5.0W max at switch on | ■ | |
| 1.2W typ when stabilised at 25°C | ■ | |
| **Warm up:** | | |
| $< \pm1x10^{-8}$ 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:** < -30dB 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: **HCD361/DPFN 10.0MHz**
**HCD361/ERFN 5.0MHz**
Option code X (eg HCD361/X) denotes a custom specification.

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