



Scale 1:2

Features

- **Frequencies up to 100MHz**
- **Internal multiplier above 50.0MHz**
- **Single oven & oscillator supply**
- **12V supply standard, 15V or 18V optional**
- **Custom options available**

Specifications

| Parameters | Product | Option Codes |
|---|-----------------------|------------------------|
| | HCD210 | |
| Frequency range: 5.0 ~ 100.0MHz | ■ | |
| Ageing per day (at despatch): < $\pm 1 \times 10^{-8}$ < $\pm 5 \times 10^{-9}$ | □ ■ | A B |
| Frequency stability: < $\pm 5 \times 10^{-7}$ per year < $\pm 1 \times 10^{-7}$ per 5% change in V_{DD} < $\pm 5 \times 10^{-10}$ per 10% change in load | ■ ■ ■ | |
| Short term stability: < $\pm 5 \times 10^{-12}$ over 1 sec (5.0MHz) < $\pm 1 \times 10^{-11}$ over 1 sec (10.0MHz) | ■ ■ | |
| Temperature stability: < $\pm 1 \times 10^{-7}$ < $\pm 5 \times 10^{-8}$ | □ ■ | M N |
| Operating temperature range: 0 to +50°C -20 to +60°C -20 to +70°C | □ ■ □ | A D F |
| Storage temperature range: -40 to +90°C | ■ | |
| Output waveform: Sine wave, 1.5V p-p $\pm 0.5V$ into 50 Ω | ■ | |
| Frequency adjustment: $\pm 2 \times 10^{-6}$ (typ) over +0.5 to +6.0V (sufficient for 10 years ageing min) Stabilised +6.0V supply provided Mechanical $\pm 5 \times 10^{-7}$ | ■ ■ | |
| Supply voltage (V_{DD}): +12V ($\pm 0.5V$) +15V ($\pm 0.5V$) +18V ($\pm 0.5V$) | ■ □ □ | N P R |
| Power consumption: 4.5W max at switch on 1.0W typ when stabilised at 25°C | ■ ■ | |
| Warm up: < $\pm 5 \times 10^{-8}$ after 10mins at +25°C | ■ | |
| Phase noise (@ 10.0MHz): < -110 dBc/Hz @ 10Hz < -130 dBc/Hz @ 100Hz < -145 dBc/Hz @ 1kHz < -150 dBc/Hz @ 10kHz < -150 dBc/Hz @ 50kHz | ■ ■ ■ ■ ■ | |
| External connectors: D9 D9 + single SMA D9 + single SMB Other (single SMC/BNC/MCX) | ■ □ □ □ | D A B specify |
| 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

Product name + option codes (if any) + frequency

eg: **HCD210 10.0MHz**

Option code X (eg HCD210/X) denotes a custom specification.