



PIN	CONNECTION
1	Freq adjust (+ve)
2	Fine adjust
3	Freq adjust (-ve)
4	Isolated RF output
5	Isolated RF output
6	+ Supply
7	DO NOT USE
8	- Supply
9	Case

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): < $\pm 1 \times 10^{-8}$ < $\pm 5 \times 10^{-9}$ < $\pm 3 \times 10^{-9}$	□ ■ □	A B C
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 50Ω	■	
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 + twin SMA Other (single or twin SMB/C/MCX)	■ □ □ □	D A G 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/BDNA 10.0MHz**
Option code X (eg HCD210/X) denotes a custom specification.