



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):	$< \pm 1 \times 10^{-8}$ $< \pm 5 \times 10^{-9}$ $< \pm 3 \times 10^{-9}$	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> 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	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Short term stability:	$< \pm 5 \times 10^{-12}$ over 1 sec (5.0MHz) $< \pm 1 \times 10^{-11}$ over 1 sec (10.0MHz)	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Temperature stability:	$< \pm 1 \times 10^{-7}$ $< \pm 5 \times 10^{-8}$	<input type="checkbox"/> M <input checked="" type="checkbox"/> N
Operating temperature range:	0 to +50°C -20 to +60°C -20 to +70°C	<input type="checkbox"/> A <input checked="" type="checkbox"/> D <input type="checkbox"/> 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 $\pm 5 \times 10^{-7}$	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Supply voltage (V_{DD}):	+12V ($\pm 0.5V$) +15V ($\pm 0.5V$) +18V ($\pm 0.5V$)	<input checked="" type="checkbox"/> N <input type="checkbox"/> P <input type="checkbox"/> R
Power consumption:	4.5W max at switch on 1.0W typ when stabilised at 25°C	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
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	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
External connectors:	D9 D9 + single SMA D9 + twin SMA Other (single or twin SMB/C/MCX)	<input checked="" type="checkbox"/> D <input type="checkbox"/> A <input type="checkbox"/> G <input type="checkbox"/> specify
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

Product name + option codes (if any) + frequency
 eg: **HCD210/BDNA 10.0MHz**
 Option code X (eg HCD210/X) denotes a custom specification.