

# HCD210

## High Frequency Chassis Mounted OCXO with Sine Output



- High frequencies up to 100MHz
- Internal multiplier above 50.0MHz
- Single oven & oscillator supply
- 12V supply standard, 15V or 18V optional

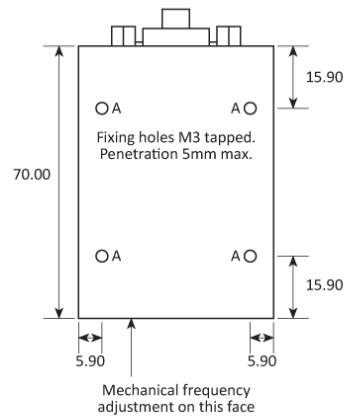
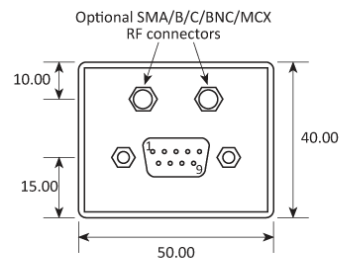
### CONFIGURABLE OPTIONS

Parameter	Option Code
<b>Frequency</b>	
<b>Ageing per day (at despatch)</b>	
Any	
< $\pm 1 \times 10^{-8}$	A
< $\pm 5 \times 10^{-9}$	B
< $\pm 3 \times 10^{-9}$	C
<b>Temperature stability</b>	
Any	
< $\pm 1 \times 10^{-7}$	M
< $\pm 5 \times 10^{-8}$	N
<b>Operating temperature range</b>	
Any	
0 to +50 °C	A
-20 to +60 °C	D
-20 to +70 °C	F
<b>Supply voltage (V<sub>DD</sub>)</b>	
Any	
+12V ( $\pm 0.5$ V)	N
+15V ( $\pm 0.5$ V)	P
+18V ( $\pm 0.5$ V)	R
<b>External connectors</b>	
Any	
D9	D
D9+single SMA	A
D9+twin SMA, no RF output on the D9	G
Other (single or twin SMB/C/MCX)	

## SPECIFICATIONS

Frequency range	5.0 ~ 100.0MHz
Dimensions	70 x 50 x 40mm
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)
Storage temperature range	-40 to +90°C
Output waveform	Sine wave, 1.5V p-p $\pm 0.5V$ into 50 $\Omega$
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 $\pm 5 \times 10^{-7}$
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
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

## PACKAGE DRAWING



PIN	CONNECTION
1	Freq adjust (+ve)
2	Fine adjust
3	Freq adjust (-ve)
4	NC or isolated RF output
5	NC or isolated RF output
6	+ Supply
7	NC or alarm output
8	- Supply
9	Case

Dimensions in mm

## ORDERING INFORMATION

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To request a quotation for the HCD210 please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at [sales@golledge.com](mailto:sales@golledge.com).

Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## CONSTRUCTION

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Shielded metal enclosure

## HANDLING & STORAGE

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Human Body Model (HBM) 1A (250V to <500V)



Moisture Sensitivity Level (MSL): 1 (or not applicable)

## COMPLIANCE

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Lead-free (< 0.1% by weight )



RoHS compliant with no exemptions. [See our declaration](#)



REACH compliant. [See our statement](#)



Free of conflict minerals. [See our declaration](#)



Free of Halogens. [See our declaration](#)



Free of Ozone-depleting substances. [See our declaration](#)