

# **HCD220**

## **OCXO Sine Output**

- Temperature stability down to 1ppb
- Twin RF outputs available
- Oven alarm option on D9 connector
- Custom options available



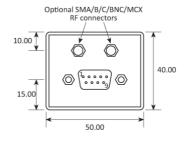
Parameter	Option Code
Frequency	
Ageing per day (at despatch)	
Any	
< ±1x10 <sup>-9</sup>	D
< ±2x10 <sup>-10</sup>	F
< ±1x10 <sup>-10</sup> (<10MHz only)	G
Temperature stability	
Any	
< ±1x10 <sup>-8</sup>	R
< ±5x10 <sup>-9</sup>	S
< ±3x10 <sup>-9</sup>	Т
< ±1x10 <sup>-9</sup>	V
Operating temperature range	
Any	
0 to +50°C	А
-10 to +60°C	С
-20 to +70°C	F
-40 to +70°C	G
Output waveform	
Sine wave, 7dBm (±1dBm) into 50Ω	
Supply voltage (V <sub>DD</sub> )	
Any	
+12V (±0.5V)	N
+24V (±0.5V)	Т
External connectors	
Any	
D9	D
D9 + single SMA	А
D9 + twin SMA	G

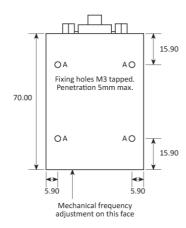


### **SPECIFICATIONS**

Frequency range	5.0 ~ 16.0MHz
Dimensions	70 x 50 x 40mm
Frequency stability	< ±2x10 <sup>-8</sup> per year < ±1x10 <sup>-9</sup> per 10% change in V <sub>DD</sub> < ±5x10 <sup>-10</sup> per 10% change in load
Short term stability	$< \pm 5x10^{-12}$ over 1 sec (5.0MHz) $< \pm 1x10^{-11}$ over 1 sec (10.0MHz)
Storage temperature range	-40 to +90°C
Frequency adjustment	±5x10 <sup>-7</sup> (typ) over +0.5 to +8V (sufficient for 10 years ageing min) Stabilised +8V supply provided Mechanical ±5x10 <sup>-7</sup>
Power consumption	5.0W max at switch on 2.0W typ when stabilised at 25°C
Warm up	< ±1x10 <sup>-8</sup> after 12mins at +25°C
Phase noise (@ 10.0MHz)	< -130 dBc/Hz @ 10Hz < -140 dBc/Hz @ 100Hz < -155 dBc/Hz @ 1kHz < -158 dBc/Hz @ 10kHz < -160 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**

To request a quotation for the HCD220 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 <a href="mailto:sales@golledge.com">sales@golledge.com</a>.

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.

#### **HANDLING & STORAGE**



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



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

#### CONSTRUCTION

Shielded metal enclosure

#### **COMPLIANCE**



Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions. Se

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. <u>See our</u>

declaration