# HCD331

## 5V OCXO with CMOS Output

- Temperature stability down to 20ppb
- Single 5V oven & oscillator supply
- Low height compact package
- Standard European IEC CO-08 pin-out
- Custom options available



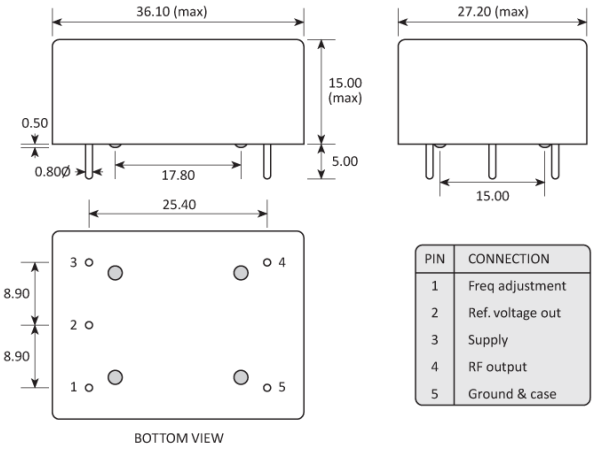

### CONFIGURABLE OPTIONS

| Parameter | Option Code |
|---|---|
| Frequency | |
| Ageing per day (at despatch) | |
| Any | |
| < ±1x10$^{-8}$ | A |
| < ±5x10$^{-9}$ | B |
| < ±3x10$^{-9}$ | C |
| Temperature stability | |
| Any | |
| < ±1x10$^{-7}$ | M |
| < ±5x10$^{-8}$ | N |
| < ±2x10$^{-8}$ | P |
| Operating temperature range | |
| Any | |
| 0 to +50°C | A |
| -20 to +60°C | D |
| -20 to +70°C | F |
| Supply voltage ($V_{DD}$) | |
| +5.0V (±0.25V) | L |

## SPECIFICATIONS

| | |
|---|---|
| Frequency range | 13.0 ~ 20.0MHz |
| Dimensions | 36.1 x 27.2 x 15.0mm |
| Frequency stability | < ±3x10$^{-7}$ per year<br>< ±5x10$^{-8}$ per 10% change in $V_{DD}$ |
| Storage temperature range | -40 to +90°C |
| Output waveform | 50pF CMOS, 45:55 duty |
| Frequency adjustment | ±1x10$^{-5}$ (typ) over +0.5 to +4.0V<br>(sufficient for 15 years ageing min)<br>Stabilised +4.0V supply provided |
| Power consumption | 4.5W max at switch on<br>1.0W typ when stabilised at 25°C |
| Warm up | < ±5x10$^{-8}$ after 10mins at +25°C |
| Phase noise (@ 10.0MHz) | < -100dBc/Hz @ 10Hz<br>< -120dBc/Hz @ 100Hz<br>< -135dBc/Hz @ 1kHz<br>< -150dBc/Hz @ 10kHz<br>< -150dBc/Hz @ 50kHz |
| 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 adjustment |
| 2 | Ref. voltage out |
| 3 | Supply |
| 4 | RF output |
| 5 | Ground & case |

Dimensions in mm

## ORDERING INFORMATION

To request a quotation for the HCD331 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.

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

Solder sealed metal can

## MATERIAL COMPOSITION

Lead-free (< 0.1% by weight )

RoHS 2 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

## OTHER INFORMATION

### About Golledge

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.


### Come and visit

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Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations).
To take advantage of our highly praised service get in touch with us today.