HCD680

High Performance OCXO with Sine Output and US pin-out

- Temperature stability down to 1ppb
- Single 12V supply (12V ~ 30V optional)
- Standard US footprint & pin-out
- Custom options available

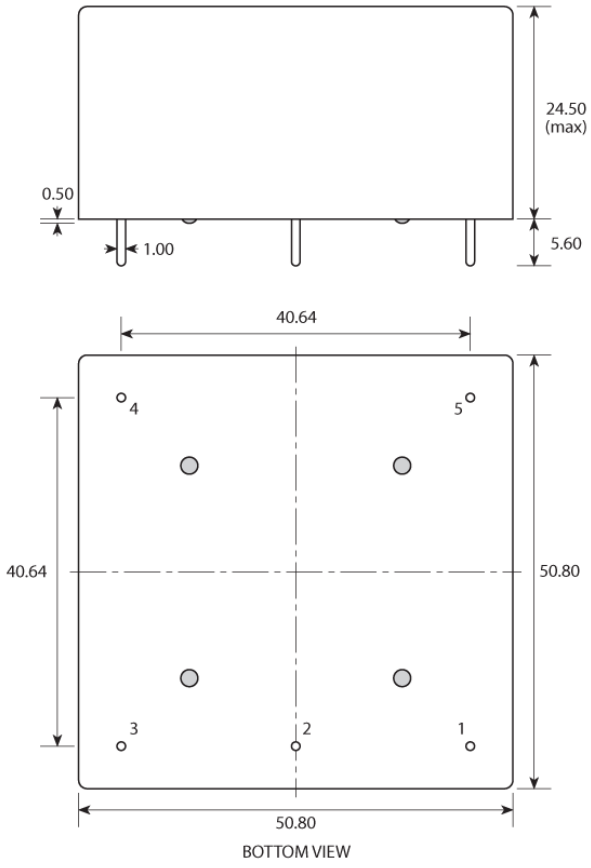
CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency	
Ageing per day (at despatch)	
Any	
< $1x10^{-9}$	D
< $5x10^{-10}$	E
< $2x10^{-10}$	F
Temperature stability	
Any	
< $1x10^{-8}$	R
< $5x10^{-9}$	S
< $3x10^{-9}$	T
< $1x10^{-9}$	V
Operating temperature range	
Any	
-10 to +60°C	C
-20 to +70°C	F
-40 to +70°C	G
Output waveform	
Sine wave, 7dBm (±1dBm) into 50Ω	
Other options to +13dBm max	
Supply voltage (V_{DD})	
+12V (±0.5V)	N
Other options from 12~30V	specify
Close-in phase noise (@ 5.0MHz)	
Any	
< -110 dBc/Hz @ 1Hz, <-135 @ 10Hz	Z
< -123 dBc/Hz @ 1Hz, <-140 @ 10Hz	
< -150 dBc/Hz @ 100Hz	
Close-in phase noise (@ 10.0MHz)	
Any	
< -95 dBc/Hz @ 1Hz, <-130 @ 10Hz	Z
< -108 dBc/Hz @ 1Hz, <-135 @ 10Hz	
< -145 dBc/Hz @ 100Hz	

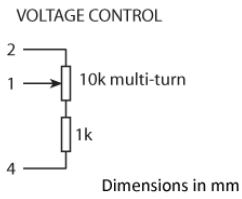
SPECIFICATIONS

Frequency range	5.0 ~ 20.0MHz
Dimensions	50.8 x 50.8 x 24.5mm
Frequency stability	< $1x10^{-7}$ per year (option D) < $2x10^{-8}$ per year (option F) < $1x10^{-9}$ per 10% change in V_{DD} < $5x10^{-10}$ per 10% change in load
Storage temperature range	-40 to +90°C
Frequency adjustment	±$5x10^{-7}$ (typ) over +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided
Power consumption	5.0W max at switch on 1.2W typ when stabilised at 25°C
Warm up	< $1x10^{-8}$ after 8mins at +20°C
Allan deviation (ADEV), 1 sec	< $5x10^{-13}$ (5.0MHz) < $1x10^{-12}$ (10.0MHz)
Far-out phase noise (all freqs)	< -155 dBc/Hz @ 1kHz < -157 dBc/Hz @ 10kHz < -157 dBc/Hz @ 100kHz
Harmonics	< -30dB wrt carrier

PACKAGE DRAWING



PIN	CONNECTION
1	Freq adjustment
2	Ref voltage out
3	RF output
4	Ground
5	Supply



Dimensions in mm

ORDERING INFORMATION

To request a quotation for the HCD680 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.

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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.