

# HCD660

## High Performance OCXO with Sine Output and European pin-out



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

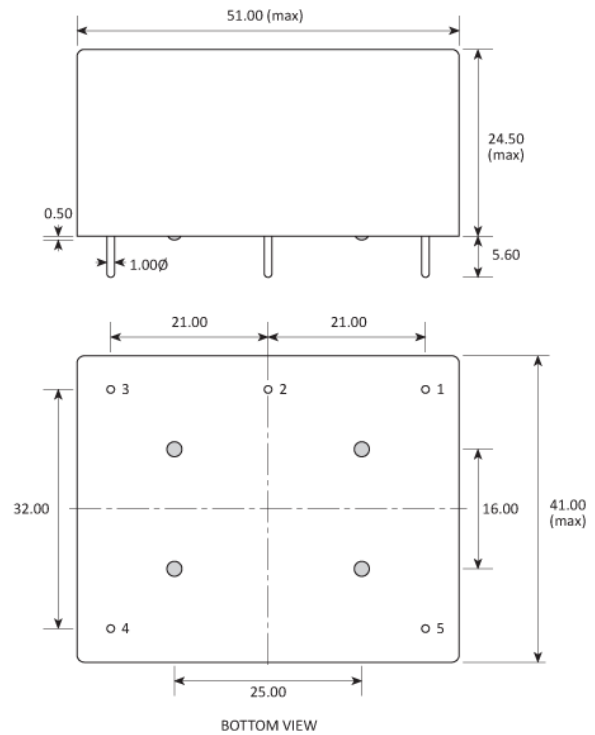
### CONFIGURABLE OPTIONS

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

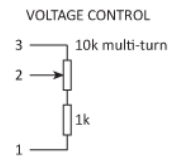
## SPECIFICATIONS

Frequency range	5.0 ~ 20.0MHz
Dimensions	51.0 x 41.0 x 24.5mm
Frequency stability	$< 1 \times 10^{-7}$ per year (option D) $< 2 \times 10^{-8}$ per year (option F) $< 1 \times 10^{-9}$ per 10% change in $V_{DD}$ $< 5 \times 10^{-10}$ per 10% change in load
Storage temperature range	-40 to +90 °C
Frequency adjustment	$\pm 5 \times 10^{-7}$ (typ) over +0.5 to +7.0V
Power consumption	5.0W max at switch on 1.2W typ when stabilised at 25 °C
Warm up	$< 1 \times 10^{-8}$ after 8mins at +20 °C
Allan deviation (ADEV), 1 sec	$< 5 \times 10^{-13}$ (5.0MHz) $< 1 \times 10^{-12}$ (10.0MHz)
Far-out phase noise (all freqs)	$< -155$ dBc/Hz @ 1kHz $< -157$ dBc/Hz @ 10kHz $< -157$ dBc/Hz @ 100kHz
Harmonics	$< -30$ dB wrt carrier

## PACKAGE DRAWING



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



Dimensions in mm

## ORDERING INFORMATION

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To request a quotation for the HCD660 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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Solder sealed metal can

## 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](#)