

HCD686

Fast Warm Up OCXO with CMOS

Output and US Pin-out

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



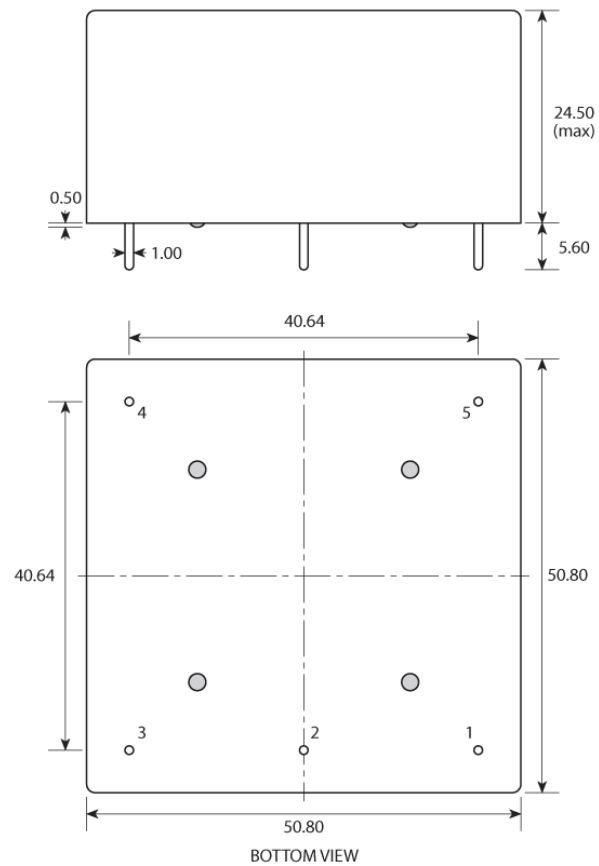
CONFIGURABLE OPTIONS

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
Supply voltage (V _{DD})	
+12V (±0.5V)	N
Other options from 12~30V	
Close-in phase noise (@ 5.0MHz)	
Any	
< -110 dBc/Hz @ 1Hz, <-135 @ 10Hz	
< -123 dBc/Hz @ 1Hz, <-140 @ 10Hz	Z
< -150 dBc/Hz @ 100Hz	
Close-in phase noise (@ 10.0MHz)	
Any	
< -95 dBc/Hz @ 1Hz, <-130 @ 10Hz	
< -108 dBc/Hz @ 1Hz, <-135 @ 10Hz	Z
< -145 dBc/Hz @ 100Hz	

SPECIFICATIONS

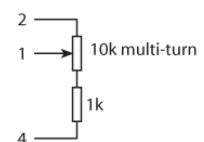
Frequency range	5.0 ~ 20.0MHz
Dimensions	50.8 x 50.8 x 24.5mm
Frequency stability	$< 1 \times 10^{-7}$ per year (option D) $< 2 \times 10^{-8}$ per year (option F) $< 1 \times 10^{-9}$ per 10% change in V_{DD} $< 5 \times 10^{-10}$ per 10% change in load
Storage temperature range	-40 to +90 °C
Output waveform	CMOS / TTL compatible
Frequency adjustment	$\pm 5 \times 10^{-7}$ (typ) over +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided
Power consumption	10.0W max at switch on 1.3W typ when stabilised at 25 °C
Warm up	$< 1 \times 10^{-8}$ after 2.25mins at +25 °C
Allan deviation (ADEV), 1 sec	$< 5 \times 10^{-13}$ over 1 sec (5.0MHz) $< 1 \times 10^{-12}$ over 1 sec (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	Freq adjustment
2	Ref voltage out
3	RF output
4	Ground
5	Supply

VOLTAGE CONTROL



Dimensions in mm

ORDERING INFORMATION

To request a quotation for the HCD686 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.

CONSTRUCTION

Solder sealed metal can

HANDLING & STORAGE



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



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

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.