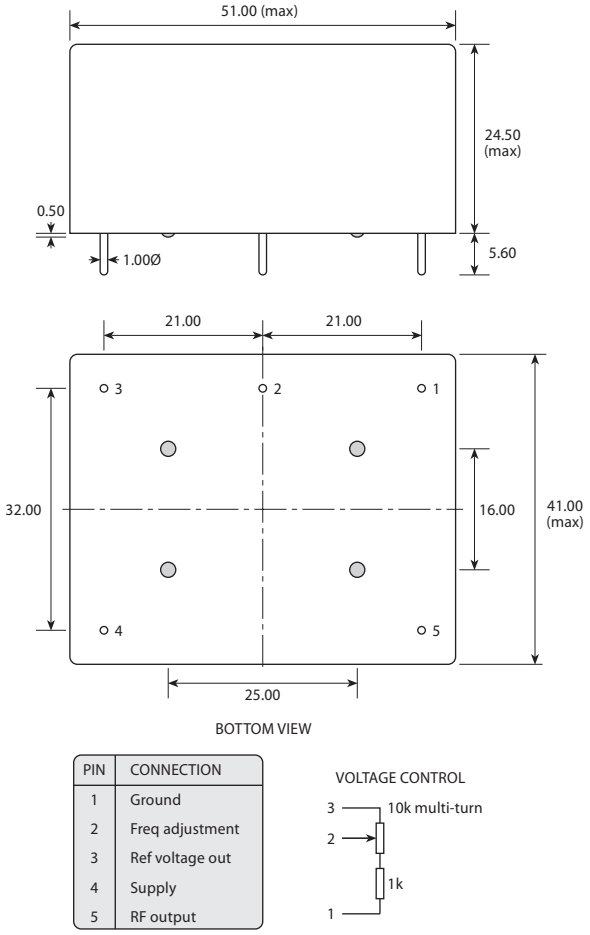
OCXO CMOS Output High Performance

HCD661

RoHS 2002/95/EC

Pb LeadFree



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

Features

- **Temperature stability down to 3ppb**
- **Single 12V supply (12V ~ 30V optional)**
- **Standard European pin-out**
- **Custom options available**

Standard Models

Freq	Specification	Ageing per day	Temperature stability	Part No
5.0MHz	HCD661/DRFN	< $1x10^{-9}$	< $1x10^{-8}$ -20+70°C	MS06946
5.0MHz	HCD661/FTFN	< $2x10^{-10}$	< $3x10^{-9}$ -20+70°C	MS06948
10.0MHz	HCD661/DRFN	< $1x10^{-9}$	< $1x10^{-8}$ -20+70°C	MS06945
10.0MHz	HCD661/FTFN	< $2x10^{-10}$	< $3x10^{-9}$ -20+70°C	MS06947

Specifications

Parameters	Product HCD661	Option Codes
Frequency range: 5.0 ~ 20.0MHz	■	
Ageing per day (at despatch):		
< $1x10^{-9}$	■	D
< $5x10^{-10}$	□	E
< $2x10^{-10}$	■	F
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	■	
Temperature stability: < $1x10^{-8}$	■	R
< $5x10^{-9}$	□	S
< $3x10^{-9}$	■	T
< $1x10^{-9}$	□	V
Operating temperature range:		
-10 to +60°C	□	C
-20 to +70°C	■	F
-40 to +70°C	□	G
Storage temperature range: -40 to +90°C	■	
Output waveform: CMOS / TTL compatible	■	
Frequency adjustment: ±$5x10^{-7}$ (typ) over +0.5 to +7.0V (sufficient for 10 years ageing min) Stabilised +7.0V supply provided	■	
Supply voltage (V_{DD}): +12V (±0.5V)	■	N
Other options from 12~30V	□	specify
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)	■	
Close-in phase noise (@ 5.0MHz):		
< -110 dBc/Hz @ 1Hz, <-135 @ 10Hz	■	
< -123 dBc/Hz @ 1Hz, <-140 @ 10Hz	□	Z
< -150 dBc/Hz @ 100Hz	■	
Close-in phase noise (@ 10.0MHz):		
< -95 dBc/Hz @ 1Hz, <-130 @ 10Hz	■	
< -108 dBc/Hz @ 1Hz, <-135 @ 10Hz	□	Z
< -145 dBc/Hz @ 100Hz	■	
Far-out phase noise (all freqs):		
< -155 dBc/Hz @ 1kHz	■	
< -157 dBc/Hz @ 10kHz	■	
< -157 dBc/Hz @ 100kHz	■	
Harmonics: < -30dB wrt carrier	■	

■ Standard. □ Optional - Please specify required code(s) when ordering

Ordering Information

Part No, or product name + option codes + frequency
eg: **HCD661/DRFN 10.0MHz**
Option code X (eg HCD661/X) denotes a custom specification.

Tel: **+44 1460 256 100** Fax: **+44 1460 256 101** E-mail: **sales@golledge.com** Web: **www.golledge.com**

Golledge

05 Mar 2013