

# **HCD661**

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

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



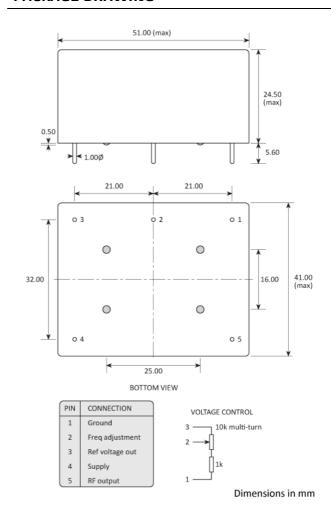
Parameter	Option Code
Frequency	·
Ageing per day (at despatch)	
Any	
< 1x10 <sup>-9</sup>	D
< 5x10 <sup>-10</sup>	Е
< 2x10 <sup>-10</sup>	F
Temperature stability	
Any	
< 1x10 <sup>-8</sup>	R
< 5x10 <sup>-9</sup>	S
< 3x10 <sup>-9</sup>	Т
< 1x10 <sup>-9</sup>	V
Operating temperature range	
Any	
-10 to +60°C	С
-20 to +70°C	F
-40 to +70°C	G
Supply voltage (V <sub>DD</sub> )	
+12V (±0.5V)	N
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



# **SPECIFICATIONS**

Frequency range	5.0 ~ 20.0MHz
Dimensions	51.0 x 41.0 x 24.5mm
Frequency stability	< 1x10 <sup>-7</sup> per year (option D) < 2x10 <sup>-8</sup> per year (option F) < 1x10 <sup>-9</sup> per 10% change in V <sub>DD</sub> < 5x10 <sup>-10</sup> per 10% change in load
Storage temperature range	-40 to +90°C
Output waveform	CMOS / TTL compatible
Frequency adjustment	$\pm 5x10^{-7}$ (typ) over +0.5 to +7.0V
Power consumption	5.0W max at switch on 1.2W typ when stabilised at 25°C
Power consumption  Warm up	
·	1.2W typ when stabilised at 25°C
Warm up	1.2W typ when stabilised at 25°C < 1x10 <sup>-8</sup> after 8mins at +20°C
Warm up Allan deviation	1.2W typ when stabilised at 25°C < 1x10 <sup>-8</sup> after 8mins at +20°C < 5x10 <sup>-13</sup> (5.0MHz)
Warm up Allan deviation (ADEV), 1 sec Far-out phase noise	1.2W typ when stabilised at 25°C < 1x10 <sup>-8</sup> after 8mins at +20°C < 5x10 <sup>-13</sup> (5.0MHz) < 1x10 <sup>-12</sup> (10.0MHz) < -155 dBc/Hz @ 1kHz < -157 dBc/Hz @ 10kHz

# **PACKAGE DRAWING**







# **ORDERING INFORMATION**

To request a quotation for the HCD661 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 <a href="mailto:sales@golledge.com">sales@golledge.com</a>.

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

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. <u>See our</u>

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

#### Give us a call

#### Email us

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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.