

MCOCXO

12V OCXO CMOS Output

- Compact 14-pin DIL package (SMD optional)
- 12.0V supply voltage
- CMOS output
- Very fast warmup
- Low power consumption

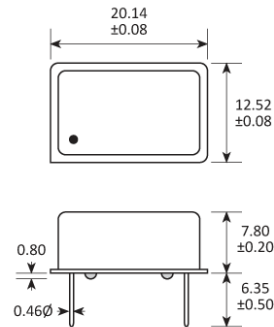


CONFIGURABLE OPTIONS

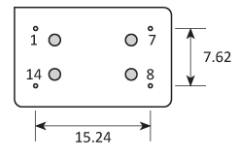
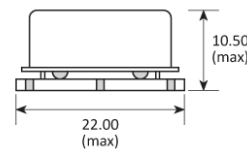
Parameter	Option Code
Frequency	
Temperature stability	
Any	
±0.2ppm max, 0 to +60°C	A
±0.05ppm max, 0 to +60°C	TA
±0.3ppm max, -20 to +70°C	B
±0.1ppm max, -20 to +70°C	TB
±0.5ppm max, -40 to +85°C	C
±0.2ppm max, -40 to +85°C	TC
±0.7ppm max, -55 to +85°C	E
±0.3ppm max, -55 to +85°C	TE
Frequency adjustment	
Any	
±3.0ppm min, control voltage 0.5~5.0V	V
±3.0ppm min, variable resistor 0~10kΩ	R
None (int accuracy ±1.0ppm)	A
None (int accuracy ±0.5ppm)	B
Package	
Through hole 14 pin DIL	
SMD option D1	D1
SMD option D2	D2

SPECIFICATIONS

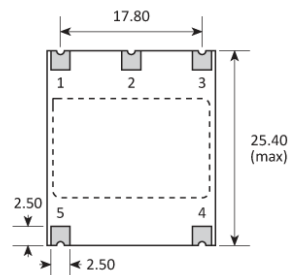
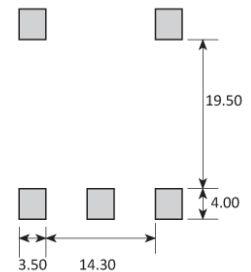
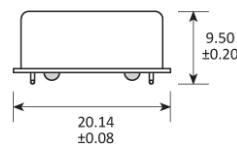
Frequency range	10.0kHz ~ 54.0MHz
Dimensions	20.1 x 12.5 x 8.0mm
Frequency stability	±0.5ppm max first year ±3.0ppm max in 10 years ±0.1ppm over $V_{DD} \pm 0.5V$ ±0.01ppm over 10% change in load
Short term stability	5×10^{-10} , t 0.1 to 30s 5×10^{-11} typ at 1s
Storage temperature range	-55 to +125 °C
Output waveform	CMOS compatible '0' = +0.4V max, '1' = 4.5V min 40:60 max Rise/fall times 7ns max (no load)
Load	3pF min, 47pF max
Start up time	5ms max
Supply voltage (V_{DD})	+12.0V (±0.5V)
Input current	250mA max for up to 10s @ 25 °C during start up 50mA max @ +25 °C 80mA max @ -20 °C
Warm up time	30s to within ±0.1ppm @ 25 °C
Phase noise (typ @ 10MHz)	-90dBc/Hz @ 10Hz -120dBc/Hz @ 100Hz -130dBc/Hz @ 1kHz -135dBc/Hz @ 10kHz
Shock & vibration	5,000g, 0.3ms ½-sine 10.0 ~ 2,000Hz, 20g

PACKAGE DRAWING
Through-hole (DIL-14)


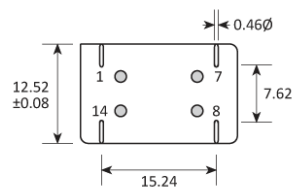
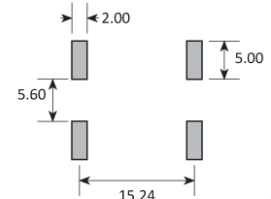
PIN	CONNECTION
1	Freq adjustment or Ground
7	Ground
8	Output
14	Supply


SMD Option D1 - mounted PCB


PAD	CONNECTION
1	Freq adjustment or Ground
2	Not connected
3	Supply
4	Output
5	Ground


SOLDER PAD LAYOUT

TOP VIEW
SMD Option D2 - formed leads


PIN	CONNECTION
1	Freq adjustment or Ground
7	Ground
8	Output
14	Supply


SOLDER PAD LAYOUT


Dimensions in mm

ORDERING INFORMATION

To request a quotation for the MCOCXO 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.

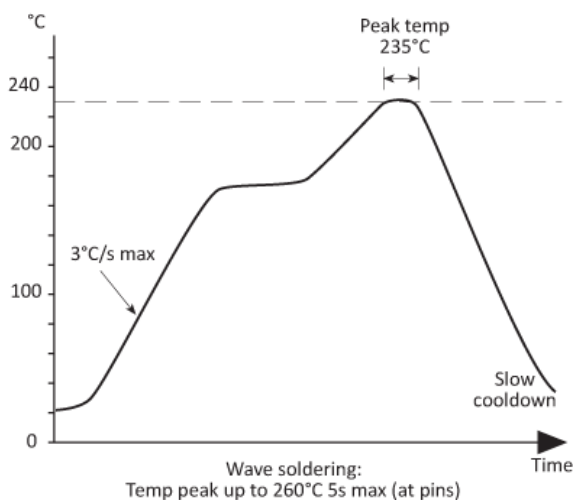
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

APPLICATIONS

This MCOCXO oven controlled oscillator is suitable for a wide range of applications including:

- Digital switching
- Telecom transmission
- SONET / SDH / DWDM / FDM/36 / WIMAX
- Airborne equipment
- Battery operated systems
- Instrumentation
- Radio transceivers

SOLDERING PROFILE



HANDLING & STORAGE



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



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

CONSTRUCTION

Resistance weld

COMPLIANCE



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](#)