

SCOCXOHV

5.0V High Frequency Fundamental CMOS OCXO

- Excellent phase noise performance @ 100MHz
- -160dBc noise floor @ 10.0MHz
- Fundamental mode frequencies up to 120MHz
- Compact 14-pin DIL package (SMD optional)
- High shock and vibration resistance



CONFIGURABLE OPTIONS

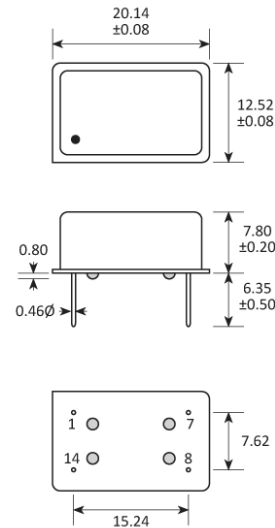
Parameter	Option Code
Frequency	
Temperature stability	
Any	
±0.05ppm max, 0 to +60°C	A
±0.025ppm max, 0 to +60°C	TA
±0.10ppm max, -20 to +70°C	B
±0.05ppm max, -20 to +70°C	TB
±0.15ppm max, -40 to +85°C	C
±0.10ppm max, -40 to +85°C	TC
Frequency adjustment	
(±2.5ppm min ≤ 40MHz, ±4.0ppm min > 40MHz)	
Any	
Control voltage 0.5V ~ 5.0V, pin 1	V
Variable resistor 0~10kΩ, pins 1 to 7	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	10.0 ~ 120MHz
Dimensions	20.1 x 12.5 x 8.0mm
Frequency stability	$\pm 0.3\text{ppm}$ max first year ($\leq 40\text{MHz}$) $\pm 2.5\text{ppm}$ max in 10 years ($\leq 40\text{MHz}$) $\pm 1.0\text{ppm}$ max first year ($> 40\text{MHz}$) $\pm 4.0\text{ppm}$ max in 10 years ($> 40\text{MHz}$) $\pm 0.1\text{ppm}$ max vs V_{DD} $\pm 30\text{ppb}$ max vs load $\pm 10\%$
Short term stability	1×10^{-10} max, t 0.1 to 30s
Storage temperature range	-55 to $+125^\circ\text{C}$
Output waveform	CMOS '0' = $+0.4\text{V}$ max, '1' = $V_{DD} - 0.5\text{V}$ min 40:60 max Rise / fall times 7ns max (no load)
Test load	3pF min, 47pF max
Start up time	5ms max
Supply voltage (V_{DD})	$+5.0\text{V}$ ($\pm 0.20\text{V}$)
Input current	300mA max for up to 10s @ 25°C during start up 80mA max @ $+25^\circ\text{C}$ 120mA max @ -20°C
Warm up time	60s to within $\pm 0.1\text{ppm}$ @ 25°C
Phase noise (dB typ @ 100MHz)	-90dBc/Hz @ 10Hz -120dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100kHz
Shock & vibration	5,000g, 0.3ms $\frac{1}{2}$ -sine 10.0 ~ 2,000Hz, 20g

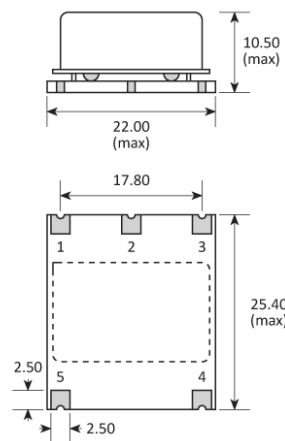
PACKAGE DRAWING

Through-hole (DIL-14)



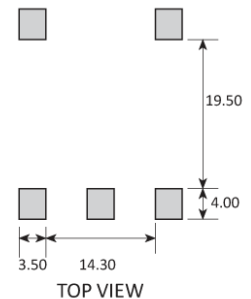
PIN	CONNECTION
1	Freq adjustment or Ground
7	Ground
8	Output
14	Supply

SMD Option D1 - mounted PCB

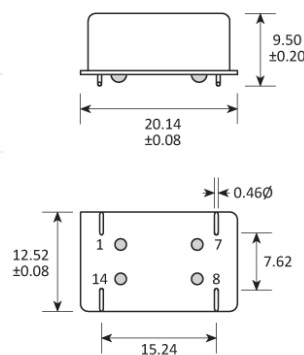


PAD	CONNECTION
1	Freq adjustment or Ground
2	Not connected
3	Supply
4	Output
5	Ground

SOLDER PAD LAYOUT

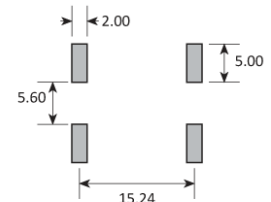


SMD Option D2 - formed leads



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 SCOCXOHV 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.

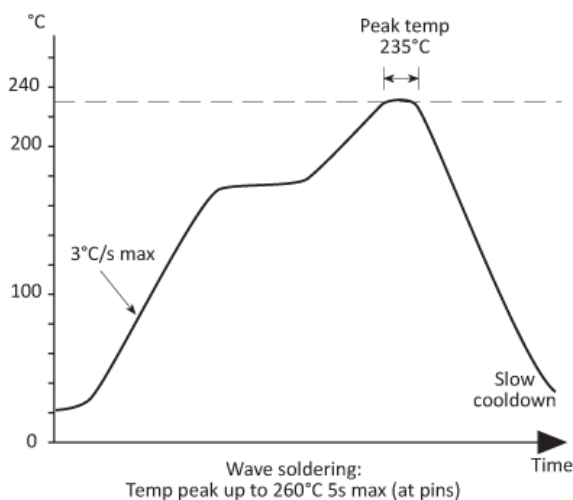
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

APPLICATIONS

This SCOCXOHV 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](#)