

# SCOCXOS

## 12V Tight Stability OCXO with Sine Output

- Ultra high stability
- Compact 14-pin DIL package (SMD optional)
- 12.0V supply voltage
- Sinewave output
- Very fast warmup



### CONFIGURABLE OPTIONS

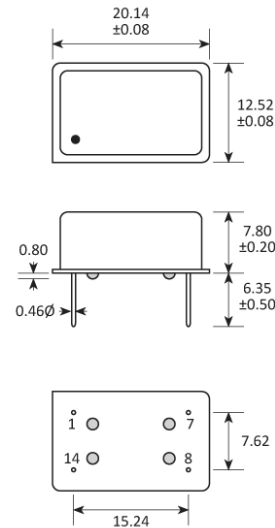
Parameter	Option Code
Frequency	
Temperature stability	
Any	
$\pm 0.025\text{ppm max, } 0 \text{ to } +60^\circ\text{C}$	A
$\pm 0.05\text{ppm max, } -20 \text{ to } +70^\circ\text{C}$	B
$\pm 0.1\text{ppm max, } -40 \text{ to } +85^\circ\text{C}$	C
Frequency adjustment	
Any	
$\pm 2.5\text{ppm min. via control voltage } 0.5\sim 5.0\text{V}$	V
$\pm 2.5\text{ppm min. via variable resistor } 0\sim 10\text{k}\Omega$	R
None (int accuracy $\pm 1.0\text{ppm}$ )	A
None (int accuracy $\pm 0.5\text{ppm}$ )	B
Package	
Through hole 14 pin DIL	
SMD option 1	D1
SMD option 2	D2

## SPECIFICATIONS

Frequency range	10.0kHz ~ 54.0MHz
Dimensions	20.1 x 12.5 x 8.0mm
Frequency stability	±0.3ppm max first year ±2.5ppm max in 10 years ±0.1ppm over $V_{DD}$ ±0.5V ±10ppb max vs load ±5%
Short term stability	$1 \times 10^{-10}$ , t 0.1 to 30s $5 \times 10^{-11}$ typ at 1s
Storage temperature range	-65 to +125°C
Output waveform	Sinewave, 1kΩ // 5pF Harmonics < -10dBc Spurii < -70dBc
Level	>1V <sub>pp</sub> (≤20MHz) >1V <sub>pp</sub> (>20MHz)
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)	-100dBc/Hz @ 10Hz -130dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -145dBc/Hz @ 10kHz
Shock & vibration	5,000g, 0.3ms ½-sine 10.0 ~ 2,000Hz, 20g

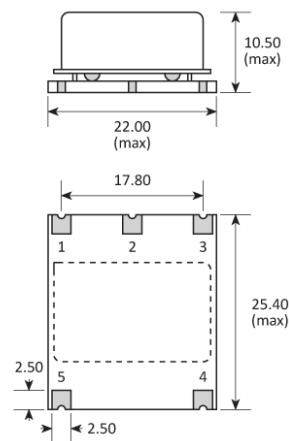
## PACKAGE DRAWING

Through-hole (DIL-14)



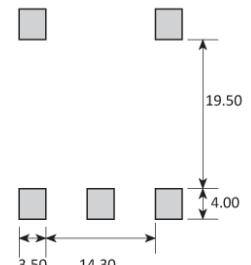
PIN	CONNECTION
1	Freq adjustment or Ground
7	Ground
8	Output
14	Supply

SMD Option D1 - mounted PCB



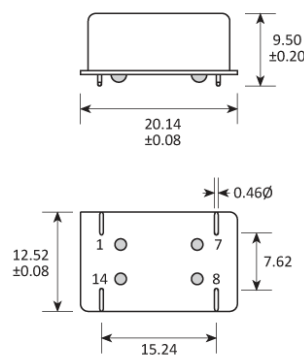
PAD	CONNECTION
1	Freq adjustment or Ground
2	Not connected
3	Supply
4	Output
5	Ground

SOLDER PAD LAYOUT



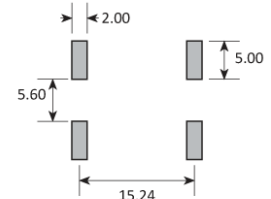
TOP VIEW

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 SCOCXOS 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](mailto: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.

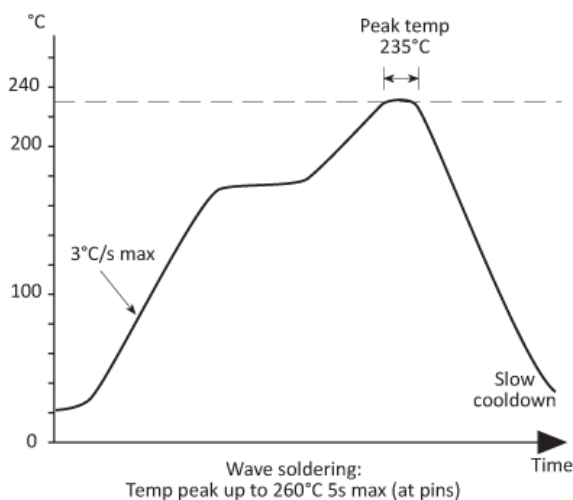
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## APPLICATIONS

This SCOCXOS 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](#)