

# SCOCXO

## 12V CMOS Output Tight Stability

### OCXO

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

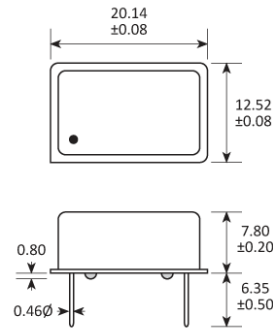


### CONFIGURABLE OPTIONS

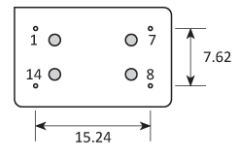
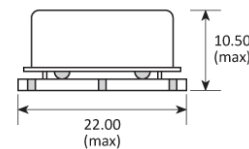
Parameter	Option Code
Frequency	
Temperature stability	
Any	
±0.05ppm max, 0 to +60°C	A
±0.025ppm max, 0 to +60°C	TA
±0.1ppm max, -20 to +70°C	B
±0.05ppm max, -20 to +70°C	TB
±0.15ppm max, -40 to +85°C	C
±0.1ppm max, -40 to +85°C	TC
±0.4ppm max, -55 to +85°C	E
±0.2ppm max, -55 to +85°C	TE
Frequency adjustment (±2.5ppm min)	
Any	
±2.5ppm min via control voltage 0.5~5.0V	V
±2.5ppm min via variable resistor 0~10kΩ	R
None (int accuracy ±1.0ppm)	A
None (int accuracy ±0.5ppm)	B
Package	
Any	
Through hole 14 pin DIL	
SMD option 1	D1
SMD option 2	D2

**SPECIFICATIONS**

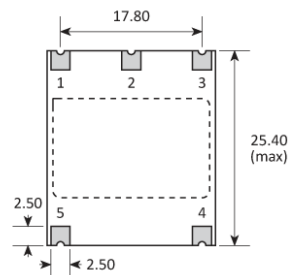
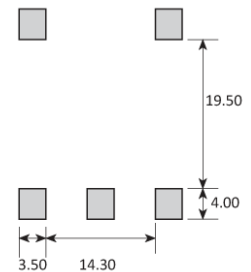
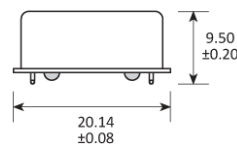
Frequency range	10.0kHz ~ 54.0MHz
Dimensions	20.1 x 12.5 x 8.0mm
Frequency stability	±0.3ppm max first year ±2.5ppm max in 10 years ±0.1ppm over $V_{DD} \pm 0.5V$ ±0.01ppm over 10% change in load
Short term stability	$1 \times 10^{-10}$ , $\tau$ 0.1 to 30s $5 \times 10^{-11}$ typ at 1s
Storage temperature 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)**


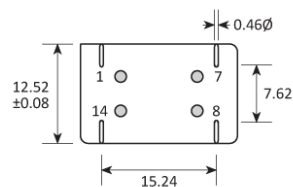
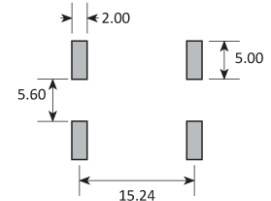
PIN	CONNECTION
1	Freq adjustment or Ground
7	Ground
8	Output
14	Supply


**SMD Option D1 - mounted PCB**


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


**SOLDER PAD LAYOUT**

**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 SCOCXO 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.

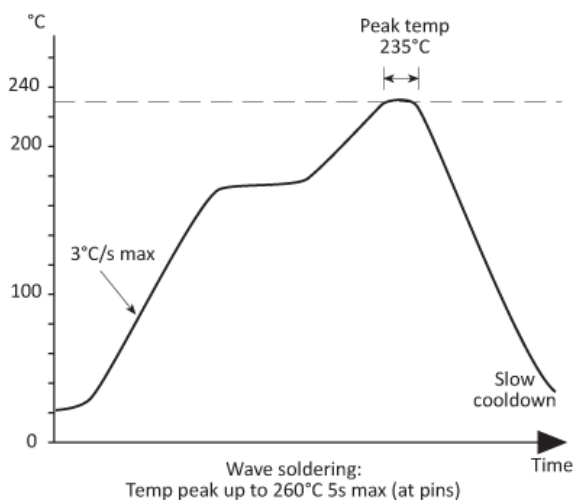
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## APPLICATIONS

This SCOCXO 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

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Resistance weld

## COMPLIANCE

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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](#)