

# GTXO-14V

## 3.3 & 5V Stratum 3 Clipped Sine TCXO

- Ideally suited for Telecomms applications
- 3.3V or 5.0V supply voltage
- Clipped Sine output
- Stratum 3 compliant models available
- $\pm 4.6$ ppm stability over 20 years



### CONFIGURABLE OPTIONS

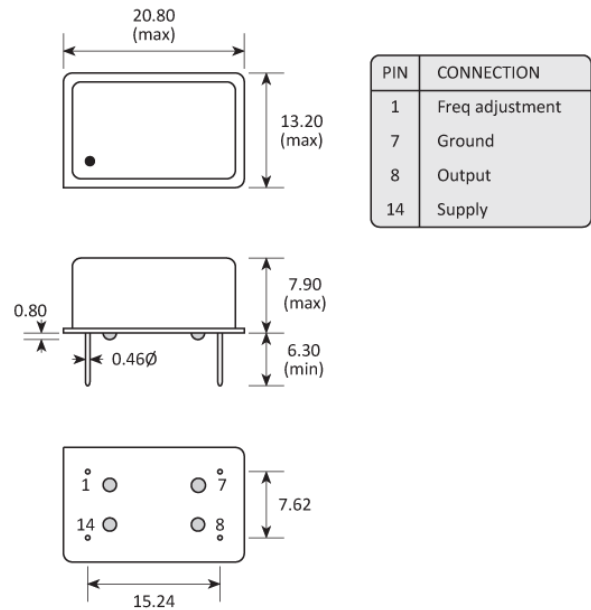
Parameter	Option Code
Frequency	
Temperature stability	
Any	
$\pm 0.28$ ppm (up to 50.0MHz)	D
$\pm 0.5$ ppm (up to 100MHz)	E
$\pm 1.0$ ppm (up to 100MHz)	F
Supply voltage ( $V_{DD}$ )	
Any	
+3.3V ( $\pm 5\%$ )	L
+5.0V ( $\pm 5\%$ )	P
Temperature range	
Any	
-20 to +70 °C	
-40 to +85 °C	I

## SPECIFICATIONS

Frequency range	6.40 ~ 100MHz
Dimensions	20.8 x 13.1 x 7.9mm
Frequency calibration	$\pm 1.0\text{ppm}$ (@ +25 °C)
Frequency stability	$\pm 4.6\text{ppm}$
* see note below	
Holdover stability (option D only)	$\pm 0.32\text{ppm}$ max over 24hrs
Temperature hysteresis	$\pm 0.4\text{ppm}$ max
Storage temperature range	-55 to +125 °C
Frequency vs supply voltage	$\pm 50\text{ppb}$ , $V_{DD} \pm 5\%$
Frequency vs load change	$\pm 50\text{ppb}$ , $Z_L \pm 5\%$
Ageing	$\pm 3.0\text{ppm}$ max 20 years
Short term ageing (option D only)	$\pm 40\text{ppb}$ per day, $\pm 4.63 \times 10^{-13}$ per sec
Supply current	1.3mA typ, 2.9mA max ( $\leq 52.0\text{MHz}$ ) 12.0mA max ( $> 52.0\text{MHz}$ )
Output waveform	Clipped sine, 1.0V p-p ( $\leq 40\text{MHz}$ ) Clipped sine, 0.8V p-p ( $> 40\text{MHz}$ )
Test load ( $Z_L$ )	10k $\Omega$ // 10pF
Start up time	1.0ms max
Frequency adjustment	$\pm 10\text{ppm}$ min 50% $V_{DD}$ $\pm 40\%$ $V_{DD}$ $\pm 5\%$ linearity, positive slope
Phase noise (typ @ 19.44MHz)	-90dBc/Hz @ 10Hz -120dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -152dBc/Hz @ 100kHz
Period jitter RMS	3ps typ, 5ps max
Phase jitter RMS	0.5ps typ, 1.0ps max, 12kHz~ $f_0/2$

\* Stability is inclusive of calibration, temperature, voltage, load, 20 years ageing, shock & vibration

## PACKAGE DRAWING



## ORDERING INFORMATION

To request a quotation for the GT XO-14V 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.

## CONSTRUCTION

Hermetically sealed DIL-14 package

## HANDLING & STORAGE



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



Moisture Sensitivity Level (MSL): 1

## COMPLIANCE



Lead-free (< 0.1% by weight )



RoHS compliant with no exemptions.