# **GTXO-93V**

# 1.8V ~ 3.6V SM VCTCXO for

## **GPS**

- Analogue compensation no steps
- Ideally suited for GPS applications
- Supply voltage from 1.8V ~ 3.6V
- Low power consumption
- Miniature SM package



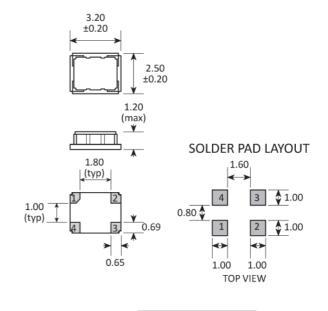
CONFIGURABLE OPTIONS	
Parameter	Option Code
Frequency	
Frequency stability	
Any	
±2.5ppm max	J
±2.0ppm max	Н
±1.5ppm max	G
±0.5ppm max	E
Temperature range	
Any	
0 to +50°C	R
-10 to +60°C	С
-20 to +75°C	N
-30 to +85°C	S
-40 to +85°C	I
Supply voltage (V <sub>DD</sub> )	
Any	
+1.8V	G
+2.3V ~ +3.6V	

<sup>\*</sup> Will operate within specification on any supply voltage from +2.3V to +3.6V

#### **SPECIFICATIONS**

Frequency range	10.0 ~ 52.0MHz
Dimensions	3.2 x 2.5 x 1.2mm
Storage	-40 to +85°C
temperature range	
Supply voltage	±0.2ppm, V <sub>DD</sub> ±5%
stability	
Load stability	±0.2ppm, Z <sub>L</sub> ±10%
Frequency slope	±0.05ppm/°C over -30+85°C
Ageing	±1.0ppm max first year
Supply current	1.5~2.0mA max
Output waveform	Clipped sine, 0.8V p-p, +DC offset
Test load (Z <sub>L</sub> )	10kΩ // 10pF
Start up time	3ms max
Frequency	±8ppm ~ ±14ppm, 1.5 ±1.0V
adjustment	$\pm 8$ ppm min, $\pm 0.9 \pm 0.9$ V ( $V_{DD} = 1.8$ V)
Harmonics	-5dBc max
Frequency tolerance	±2.0ppm max, 60mins after reflow
@ 25°C	
Net mass	33.2mg

#### PACKAGE DRAWING



PAD	CONNECTION
1	Freq adjustment
2	Ground
3	Output
4	Supply

Dimensions in mm

#### **ORDERING INFORMATION**

To request a quotation for the GTXO-93V 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 <a href="mailto:sales@golledge.com">sales@golledge.com</a>.

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.

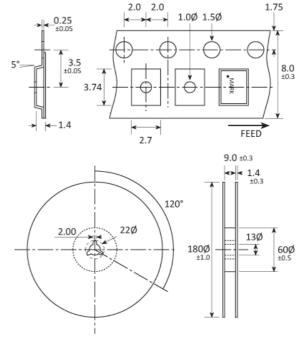
#### **MARKING**

FREQUENCY O DC O Pin 1 Marking type: Laser DC = Date code

#### **SOLDERING PROFILE**

### 260°C ±5°C 10s max °C 260 200 5°C/s max 5°C/s max 100 Slow Heat Preheat > 200°C cooldown 140~160°C 0 40s max Time 90s max 200s max

#### **TAPE & REEL SPECIFICATION**



Dimensions in mm

## **HANDLING & STORAGE**



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

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



## **CONSTRUCTION**

Ceramic body with gold-plated pads Metal lid, seam sealed

#### **COMPLIANCE**

Please refer to our **DOCUMENTS** section for more information.



**(P6)** Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions.



REACH compliant.



Au Ta Sn W Free of conflict minerals.



Free from halogens.



Free from ozone-depleting substances.