

GTXO-86T

Sinewave TCXO High Precision High Temperature

- High Precision $\pm 0.1\text{ppm}$
- High Temperature Operation $+105^\circ\text{C}$
- Tri-state function
- Clipped sine output
- Miniature SM package



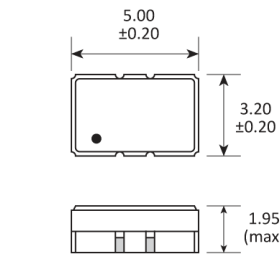
CONFIGURABLE OPTIONS

| Parameter | Option Code |
|-------------------------------|-------------|
| Frequency | |
| Frequency stability | |
| Any | |
| $\pm 0.05\text{ppm}$ | A |
| $\pm 0.1\text{ppm}$ | B |
| $\pm 0.2\text{ppm}$ | P |
| $\pm 0.28\text{ppm}$ | D |
| $\pm 0.5\text{ppm}$ | E |
| $\pm 1.0\text{ppm}$ | F |
| Temperature range | |
| Any | |
| -20 to $+70^\circ\text{C}$ | N |
| -40 to $+85^\circ\text{C}$ | I |
| -40 to $+95^\circ\text{C}$ | E |
| -40 to $+105^\circ\text{C}$ | D |
| Supply voltage (V_{DD}) | |
| Any | |
| $+3.3\text{V} \pm 5\%$ | L |
| $+2.5\text{V} \pm 5\%$ | J |

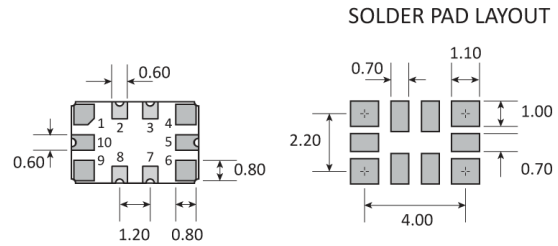
SPECIFICATIONS

| | |
|-----------------------------|---|
| Frequency range | 10.0 ~ 52.0MHz |
| Dimensions | 5.0 x 3.2 x 1.95 |
| Storage temperature range | -55 to +125°C |
| Supply voltage stability | ±0.1ppm, V_{DD} ±5% |
| Ageing | ±1.0ppm max first year |
| Supply current | 5.0mA max |
| Output waveform | Clipped sine, 0.8V p-p, +DC offset |
| Load (Z_L) | 10kΩ // 10pF |
| Start up time | 5ms max |
| Phase noise (typ @ 20.0MHz) | -122dBc/Hz @ 100Hz -142dBc/Hz @ 1kHz -154dBc/Hz @ 10kHz -157dBc/Hz @ 100kHz -159dBc/Hz @ 1MHz |
| Frequency Tolerance @25°C | ±1.0ppm max |

PACKAGE DRAWING



NOTE: To ensure optimal oscillator performance, place a by-pass capacitor of 0.1μF as close to the part as possible between Vdd and GND pads, plus one of 0.033μF from pad 7 to ground.



TOP VIEW

| PAD | CONNECTION |
|-----|------------------|
| 1 | Not connected |
| 2 | Do not connect |
| 3 | Do not connect |
| 4 | Ground |
| 5 | Enable / disable |
| 6 | Output |
| 7 | VC filter |
| 8 | Not connected |
| 9 | Supply (Vdd) |
| 10 | Ground |

Dimensions in mm

ORDERING INFORMATION

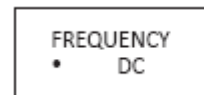
To request a quotation for the GTXO-86T please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at sales@golledge.com.

Once we've received your request our expert team will then produce a quotation tailored to meet your needs using the option codes you've selected.

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.

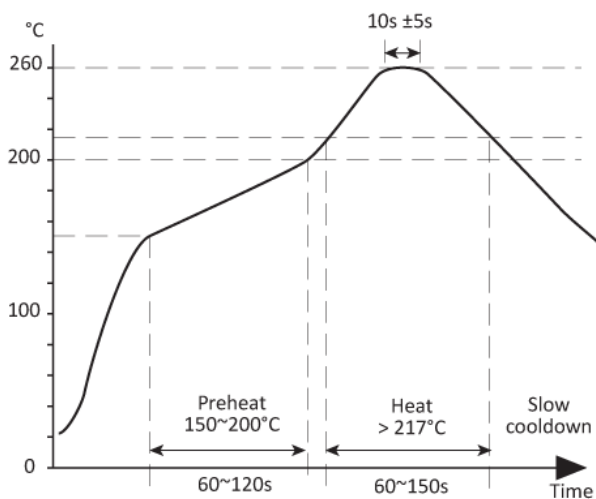
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

MARKING



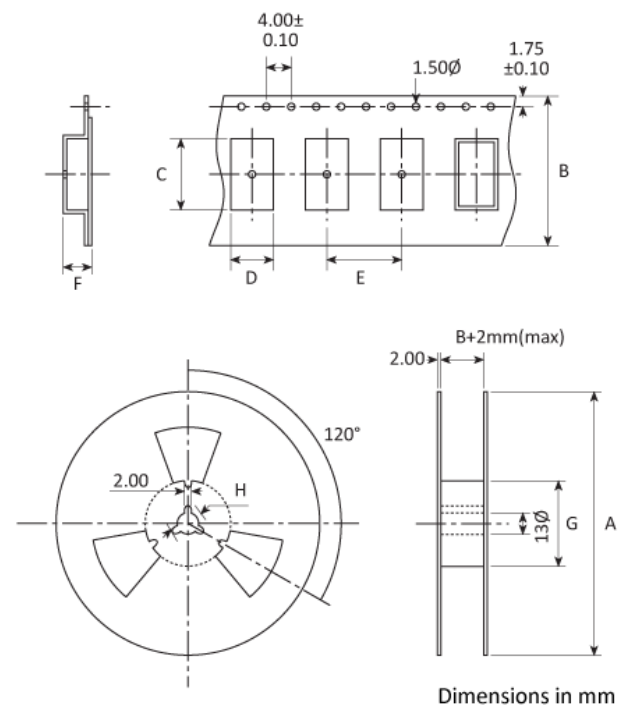
- Pin 1
- Marking type: Laser
- DC = Date code

SOLDERING PROFILE



Lead free solderability limits: 260°C ± 5°C x 10s ± 5s x 2.

TAPE & REEL SPECIFICATION



A:180 / B:13.0 / C:5.3 / D:3.5 / E:8.0 / F:1.9 / G:61

HANDLING & STORAGE



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



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

COMPLIANCE



Lead-free (< 0.1% by weight)



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](#)