

# GTXO-C98T

## High frequency CMOS TCXO 2.5V or 3.3V

- Fast Turnaround
- High Frequency
- CMOS output
- Low phase jitter
- Excellent frequency stability



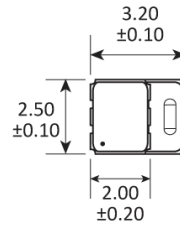
### CONFIGURABLE OPTIONS

| Parameter                         | Option Code |
|-----------------------------------|-------------|
| Frequency                         |             |
| Frequency stability               |             |
| Any                               |             |
| ±2.5ppm                           | J           |
| ±2.0ppm                           | H           |
| ±1.0ppm                           | F           |
| Temperature range                 |             |
| Any                               |             |
| -20 to +70 °C                     | N           |
| -30 to +85 °C                     | S           |
| -40 to +85 °C                     | I           |
| Supply voltage (V <sub>DD</sub> ) |             |
| Any                               |             |
| +3.3V (±5%)                       | L           |
| +2.5V (±5%)                       | J           |

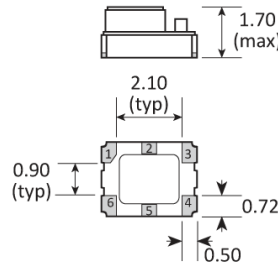
## SPECIFICATIONS

|                              |   |
|------------------------------|---|
| Frequency range              | 10.0 ~ 250.0MHz   |
| Dimensions                   | 3.2x2.5x1.7   |
| Storage temperature range    | -40 to +85 °C   |
| Supply voltage stability     | ±0.2ppm, $V_{DD} \pm 5\%$   |
| Ageing                       | ±1.0ppm max first year  |
| Supply current               | 40.0mA max  |
| Stand by current             | 20.0mA max  |
| Driving ability              | 15pF CMOS   |
| Logic levels                 | '0' level = 10% $V_{DD}$ max<br>'1' level = 90% $V_{DD}$ min                        |
| Waveform symmetry            | 45:55 @ 50% $V_{DD}$  |
| Start up time                | 5ms max   |
| Enable / disable function    | Tristate (control via pad 2)  |
| Phase noise (typ @ 250.0MHz) | -111dBc/Hz @ 1kHz<br>-123dBc/Hz @ 10kHz<br>-125dBc/Hz @ 100kHz<br>-135dBc/Hz @ 1MHz |
| Phase jitter RMS             | 0.6ps typ, 12kHz~20MHz  |
| Preset frequency @ 25 °C     | ±3.0ppm max   |

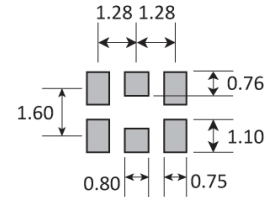
## PACKAGE DRAWING



NOTE: To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between  $V_{DD}$  and GND pads.



### SOLDER PAD LAYOUT



| PAD | CONNECTION       |
|-----|------------------|
| 1   | Not connected    |
| 2   | Enable / disable |
| 3   | Ground           |
| 4   | Output           |
| 5   | Not connected    |
| 6   | Supply           |

Dimensions in mm

## ORDERING INFORMATION

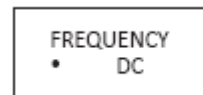
To request a quotation for the GTXO-C98T please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at [sales@golledge.com](mailto:sales@golledge.com).

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.

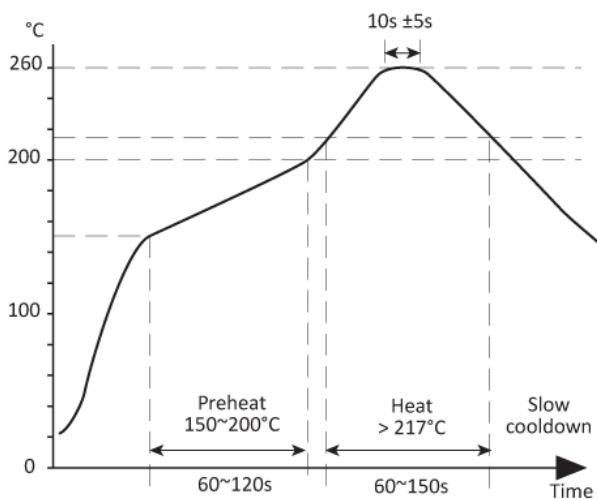
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## MARKING



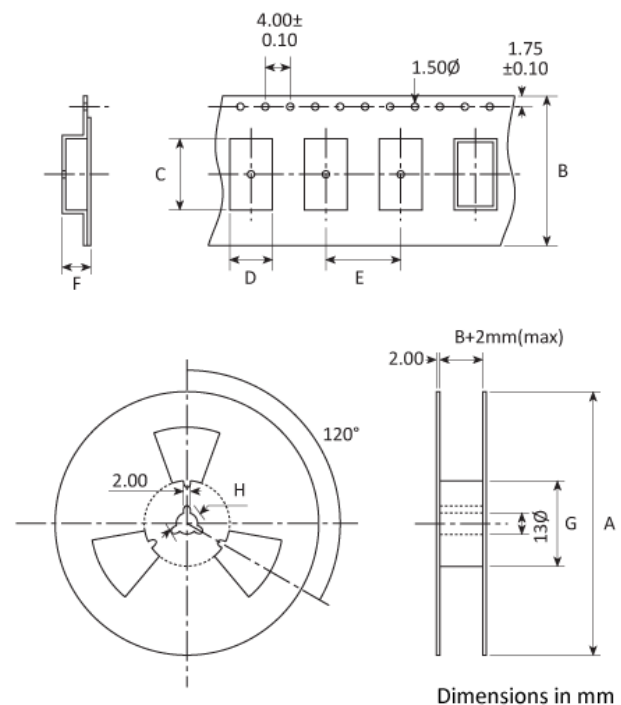
- Pin 1
- Marking type: Laser
- DC = Date code

## SOLDERING PROFILE



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

## TAPE & REEL SPECIFICATION



A:180 / B:13.0 / C:3.6 / D:2.9 / E:4.0 / F:1.8 / 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](#)