

# GTX0-253T

# 1.8V ~ 3.6V Ultra-tight Stability TCXO

- Ideally suited for tight stability applications including GPS
- ±0.5ppm frequency stability option
- Supply voltage from 1.8V ~ 3.6V
- Low power consumption
- Miniature SM package



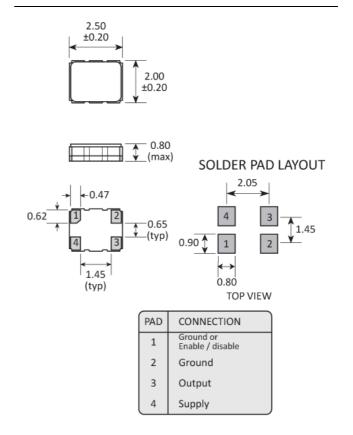
| CONFIGURABLE OPTIONS              |             |  |
|-----------------------------------|-------------|--|
| Parameter                         | Option Code |  |
| Frequency                         |             |  |
| Frequency stability               |             |  |
| Any                               |             |  |
| ±2.5ppm                           | J           |  |
| ±2.0ppm                           | Н           |  |
| ±1.5ppm                           | G           |  |
| ±1.0ppm                           | F           |  |
| ±0.5ppm                           | E           |  |
| Temperature range                 |             |  |
| Any                               |             |  |
| -10 to +60°C                      | С           |  |
| -20 to +75°C                      | N           |  |
| -30 to +85°C                      | S           |  |
| -40 to +85°C                      | 1           |  |
| Enable / disable function         |             |  |
| Any                               |             |  |
| None (pad 1 Ground)               |             |  |
| Control via pad 1                 | E           |  |
| Supply voltage (V <sub>DD</sub> ) |             |  |
| +2.8V                             |             |  |



#### **SPECIFICATIONS**

| Frequency range             | 10.0 ~ 52.0MHz                     |
|-----------------------------|------------------------------------|
| Dimensions                  | 2.5 x 2.0 x 0.8mm                  |
| Storage temperature         | -40 to +85°C                       |
| 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                            |
| Harmonics                   | -5dBc max                          |
| Phase noise                 | -130dBc/Hz @ 1kHz                  |
| Frequency tolerance         | ±2.0ppm max, 60mins after reflow   |
| @ 25°C                      |                                    |
|                             |                                    |

# **PACKAGE DRAWING**



Dimensions in mm

#### **ORDERING INFORMATION**

To request a quotation for the GTXO-253T 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.

#### **ENABLE / DISABLE FUNCTION**

| Input (pad 1) | Output (pad 3) |
|---------------|----------------|
| '1' level     | Enabled        |
| '0' level     | Disabled       |

Note: Pad 1 should not be allowed to float

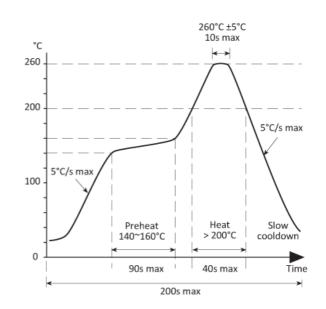


#### **MARKING**

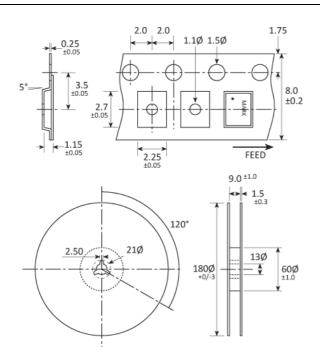
FREQUENCY
DC

Pin 1
 Marking type: Laser
 DC = Date code

# **SOLDERING PROFILE**



### **TAPE & REEL SPECIFICATION**



# **HANDLING & STORAGE**



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



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

Dimensions in mm



# **CONSTRUCTION**

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

# **COMPLIANCE**

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



**pb** 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.