

## Product Description

Description:	32.0MHz GTXO-253T/ES SM TCXO
Product family:	GTXO-253
Category:	SM TCXO
Order code:	MP06838

## Features

- ▶ AEC-Q200 qualified
- ▶ Ideally suited for GPS applications
- ▶ Low power consumption
- ▶ Miniature SM package
- ▶ Excellent frequency stability

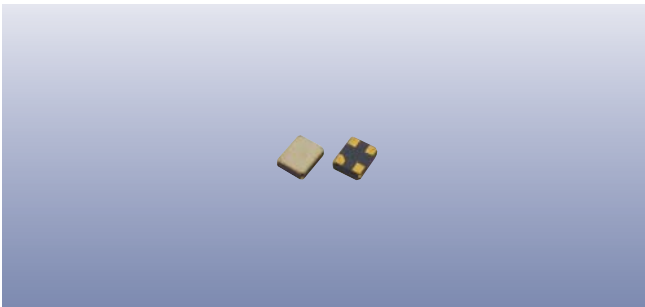
## Additional Information

For further information regarding packaging, construction, material composition, soldering profile and environment, please refer to **GTXO-253 Product Information sheet**

For dimensions, refer to package drawing: **D0314-A**

## Electrical Specifications

Parameter	Value	Notes
Nominal frequency:	32.0MHz	
Frequency tolerance: after reflow	±2.0ppm max	@25°C ± 3°C
Temperature stability: @-30 ~ +85°C @-40 ~ -30°C	±0.5ppm max ±3.0 ppm max	Wrt mid point (F <sub>MAX</sub> - F <sub>MIN</sub> ) / 2
Supply voltage stability:	±0.2ppm max	V <sub>CC</sub> ±5%
Frequency slope: @-30 ~ +85°C	±0.1ppm/°C max	
Load stability	±0.2ppm max	±10% load change
Operating temperature range:	-40 to +85°C	
Storage temperature range:	-40 to +90°C	
Supply voltage:	1.8 ~ 3.3V	Reference 3.0V
Supply current:	2.0mA max	
Output waveform:	Clipped sine	0.8V <sub>p-p</sub> min
Test load:	10kΩ // 10pF	±10%
Static temperature hysteresis:	±0.6ppm max	
Harmonics:	-5.0 dBc max	
Start up time:	2.0ms max	90% of final RF level in V <sub>p-p</sub>
Ageing:	±1.0ppm max ±1.5ppm max ±2.5ppm max ±5.0ppm max	First year @25°C Second year @25°C Over 5 years @25°C Over 10 years @25°C
SSB phase noise:	-45dBc/Hz max -75dBc/Hz max -100dBc/Hz max -130dBc/Hz max -148dBc/Hz max -150dBc/Hz max	@1Hz @10Hz @100Hz @1kHz @10kHz @100kHz



## Packaging & Handling

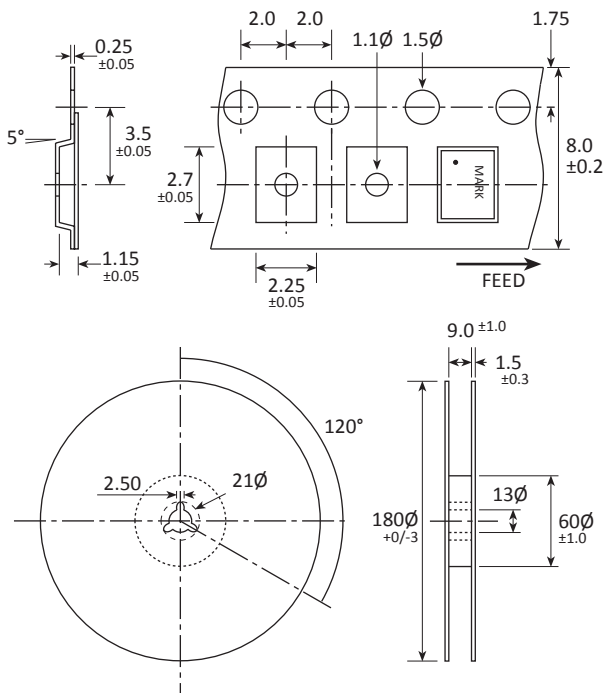
Production quantities supplied on T&R, 1k or 3k pcs per reel. Small quantities may be supplied on tape (no reel), or in bulk.

 Static sensitive product. Observe proper handling precautions

## Marking

<p>FREQUENCY</p> <ul style="list-style-type: none"> <li>DC</li> </ul>	<ul style="list-style-type: none"> <li>Pin 1</li> </ul> <p>Marking type: Laser DC = Date code</p>
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## Tape & Reel Specification





Not to scale. Dimensions in mm. Tolerances ±0.1mm unless otherwise stated

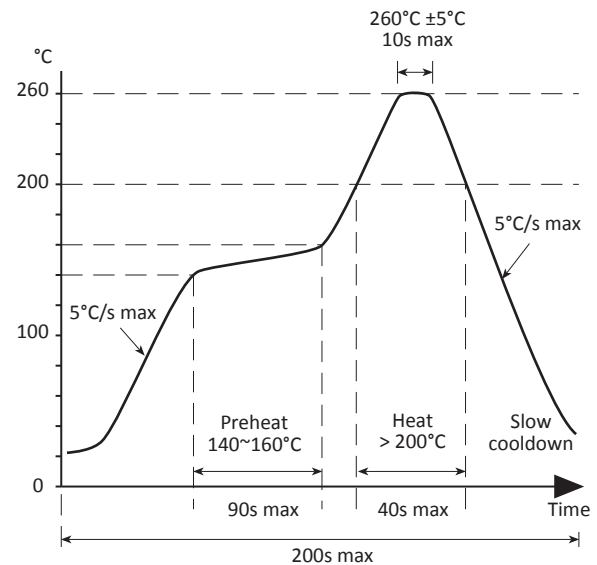
## Construction

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

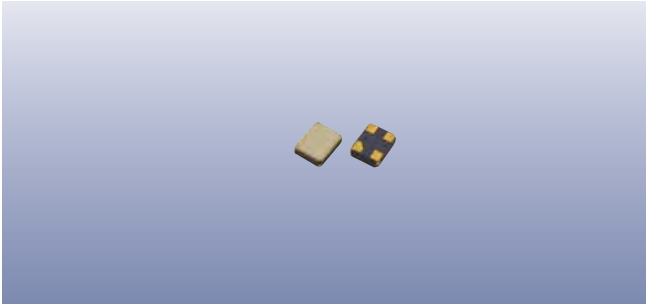
## Composition

 This product is lead-free, and is fully compliant with current RoHS directives 

## Soldering Profile



Solder resistance: 260°C x 10 secs x 2.



## Product Family

GTXO-253T no E/D

## Construction

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

## Dimensions (mm)

