

PAD	CONNECTION
1	Ground or Freq adjustment
2	Ground
3	Output
4	Supply

Features

- ▮▮▮▮ Ideally suited for wireless applications
- ▮▮▮▮ Supply voltage from 1.8V ~ 3.3V
- ▮▮▮▮ Excellent frequency stability over -40 ~ +85°C
- ▮▮▮▮ Excellent phase noise
- ▮▮▮▮ Industry standard 3225 package

Specifications

GTXO-91T: TCXO, no frequency adjustment

GTXO-91V: TCXO with VC frequency adjustment

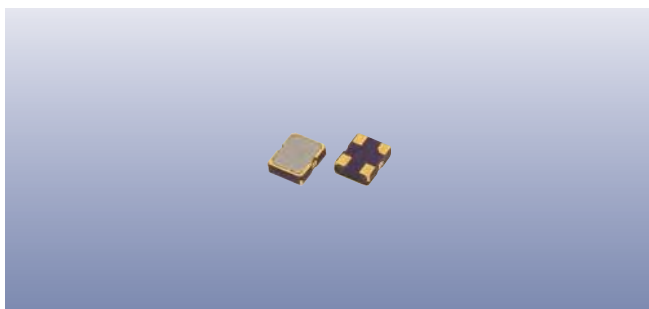
Parameters	Variant		Option Codes
	T	V	
Frequency range: 8.0 ~ 52.0MHz	■	■	
Temperature stability:			
±2.5ppm	□	□	J
±2.0ppm	□	□	H
±1.5ppm	■	■	G
±1.0ppm	□	□	F
±0.5ppm	□	□	E
Temperature range:			
-20 to +70°C	□	□	N
-30 to +75°C	□	□	S
-40 to +85°C	■	■	I
Storage temperature range:			
-40 to +85°C	■	■	
Supply voltage stability:			
±0.2ppm, V _{DD} ±5%	■	■	
Load stability: ±0.2ppm, Z _L ±10%	■	■	
Ageing: ±1.0ppm max first year	■	■	
Supply voltage (V_{DD}):			
+1.8V	□	□	G
+2.3V ~ +3.3V (see note 1)	■	■	
Supply current (max):			
1.5mA (8.0 ~ 26.0MHz)	■	■	
2.0mA (26.0 ~ 32.0MHz)	■	■	
2.5mA (32.0 ~ 52.0MHz)	■	■	
Output waveform:			
Clipped sine, 0.8V p-p, +DC offset	■	■	
Test load (Z_L): 10kΩ // 10pF	■	■	
Start up time: 2.5ms max	■	■	
Frequency adjustment:			
None	■	■	
±8ppm min, 1.5 ±1.0V		■	
±8ppm min, +0.9 ±0.9V (V _{DD} =1.8V)		□	
Phase noise (typ @ 20.0MHz):			
-90dBc/Hz @ 10Hz	■	■	
-119dBc/Hz @ 100Hz	■	■	
-139dBc/Hz @ 1kHz	■	■	
-151dBc/Hz @ 10kHz	■	■	
-153dBc/Hz @ 100kHz	■	■	
Frequency tolerance @ 25°C:			
±2.0ppm max, 60mins after reflow	■	■	

■ Standard. □ Optional - Please specify required code(s) when ordering

Ordering Information

Product name + variant + option codes + frequency
 Option codes must be included to properly specify a model.
 eg: **GTXO-91V/GI 13.00MHz** ±1.5ppm -40+85°C, TCXO with VC
GTXO-91T/ESG 14.40MHz ±0.5ppm -30+75°C, TCXO no VC, 1.8V
 Option code X (eg GTXO-91V/X) denotes a custom spec.

◆ Will operate within specification on any supply voltage from +2.3V to +3.3V.



Construction

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

Composition




This product is lead-free, and is fully compliant with the RoHS directive 2011/65/EU



Packaging & Handling

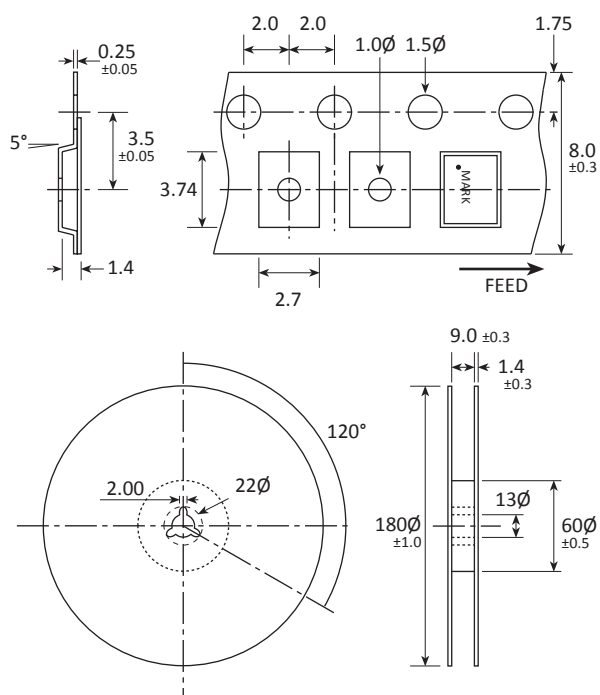
Production quantities supplied on T&R, 1k or 3k pcs per reel. Small quantities may be supplied on tape (no reel), or in bulk.

 Static sensitive product. Observe proper handling precautions

Marking

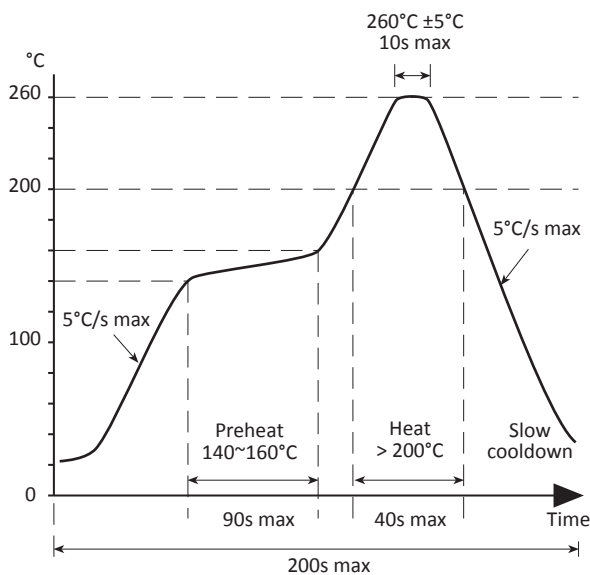
FREQUENCY • 91 DC	• Pin 1 Marking type: Laser DC = Date code
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Tape & Reel Specification



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

Soldering Profile



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