

Scale 3:1

**Features**

- ▶ Supply voltages from 2.4V ~ 5.5V
- ▶ Low power consumption
- ▶ Miniature SM package
- ▶ Excellent frequency stability

**Standard Frequencies**

Frequencies in MHz	
8.00000	16.38400
10.00000	19.20000
12.00000	19.68000
12.80000	19.80000
13.00000	20.00000
14.40000	24.55350
15.00000	26.00000
15.36000	27.00000
16.00000	40.00000
16.36800	

Other frequencies available. Please consult our sales office.

**Specifications**

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*GTXO-83T: TCXO, no frequency adjustment*

*GTXO-83V: TCXO with VC frequency adjustment*

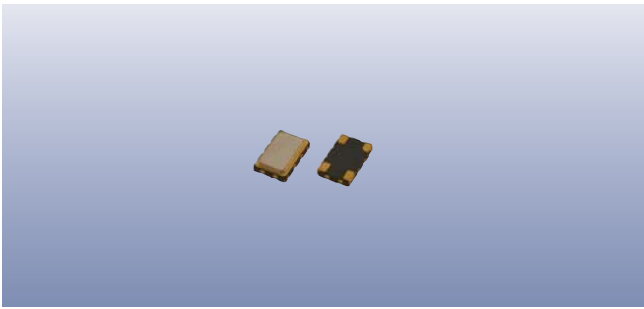
Parameters	Variant		Option Codes	
	T	V		
Frequency range:	6.0 ~ 45.0MHz	■	■	
Frequency stability:	±3.0ppm	□	□	K
	±2.5ppm	■	■	J
	±2.0ppm	□	□	H
	±1.5ppm	□	□	G
Temperature range:	0 to +50°C	□	□	R
	-10 to +60°C	□	□	C
	-20 to +70°C	□	□	N
	-30 to +75°C	■	■	S
	-40 to +85°C	□	□	I
Storage temperature range:	-40 to +85°C	■	■	
Frequency vs supply voltage:	±0.2ppm, V <sub>DD</sub> ±5%	■	■	
Ageing:	±1.0ppm max first year	■	■	
Supply voltage (V <sub>DD</sub> ):	+2.4V ~ +5.5V (see note 1)	■	■	
Supply current (max):	1.5mA (6.0 ~ 20.0MHz)	■	■	
	2.0mA (20.0 ~ 32.0MHz)	■	■	
	2.5mA (32.0 ~ 45.0MHz)	■	■	
Output waveform:	Clipped sine, 0.8V p-p (see note 2)	■	■	
Test load:	10kΩ // 10pF	■	■	
Start up time:	3ms max	■	■	
Frequency adjustment:	None ±8ppm min, +1.5 ±1.0V	■	■	
Phase noise (typ @ 20.0MHz):	-54dBc/Hz @ 1Hz	■	■	
	-86dBc/Hz @ 10Hz	■	■	
	-135dBc/Hz @ 1kHz	■	■	
	-151dBc/Hz @ 100kHz	■	■	
Stability 24hrs after reflow:	±1.0ppm max	■	■	
Preset frequency:	±0.5ppm / +25°C ±2°C	■	■	

■ 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-83V/JS 13.00MHz** ±2.5ppm -30+75°C, TCXO with VC  
**GTXO-83T/HN 14.40MHz** ±2.0ppm -20+70°C, TCXO no VC  
 Option code X (eg GTXO-83V/X) denotes a custom spec.

- ◆ 1: Will operate within specification on any supply voltage from +2.4V to +5.5V.
- ◆ 2: The output is not DC-free. A coupling capacitor (10nF) may be required.



## 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 2002/95/EC



## Packaging & Handling

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

 Static sensitive product. Observe proper handling precautions

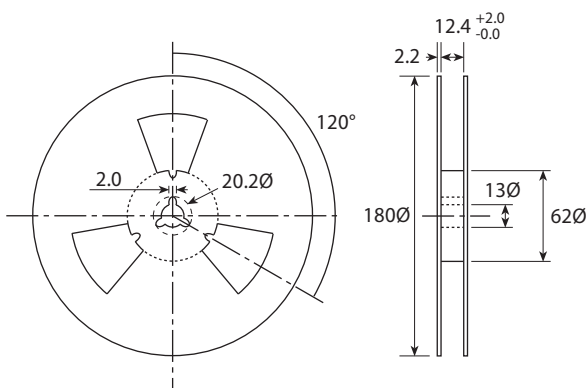
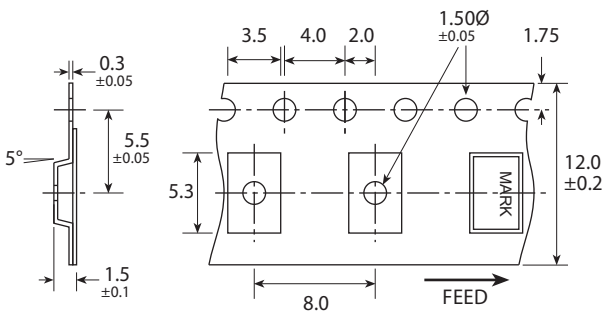
## Marking

Marking type: Laser  
DC = Date code in YM, eg "CE" = May 2003

S83	DC
FREQUENCY	

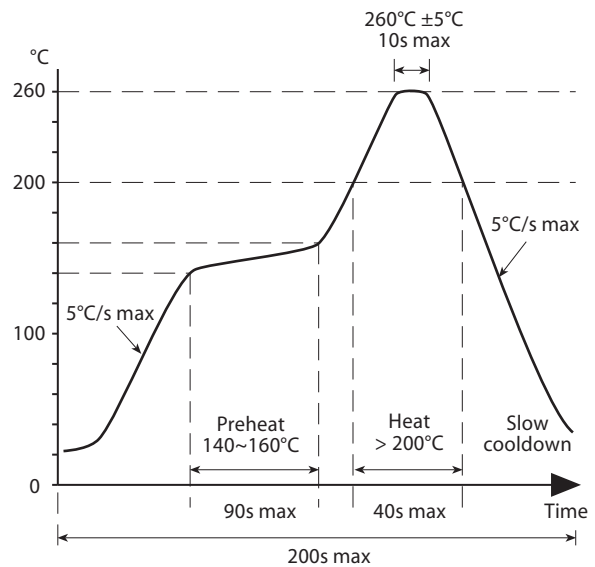
	A	B	C	D	E	F	G	H	J	K	L	M
Y	1	2	3	4	5	6	7	8	9	0		
M	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

## 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.