

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

GTXO-83T: TCXO, no frequency adjustment

GTXO-83V: TCXO with VC frequency adjustment

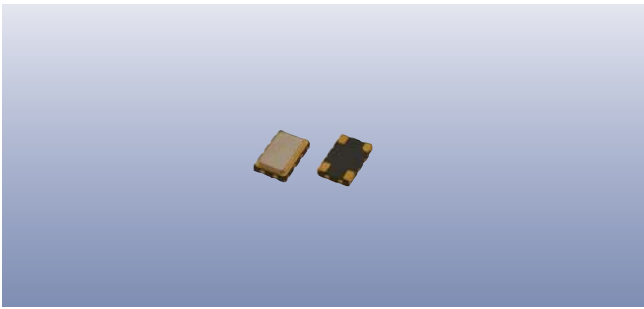
Parameters	Variant		Option Codes	
	T	V		
Frequency range:	6.0 ~ 45.0MHz	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Frequency stability:	±3.0ppm ±2.5ppm ±2.0ppm ±1.5ppm	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>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

■ 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

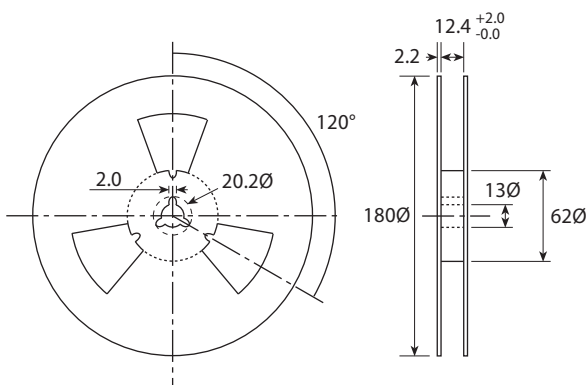
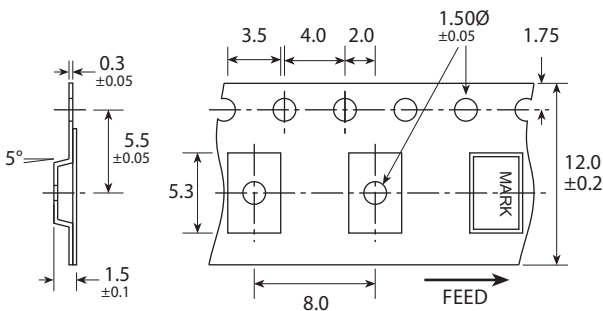
Marking

S83	DC
FREQUENCY	

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

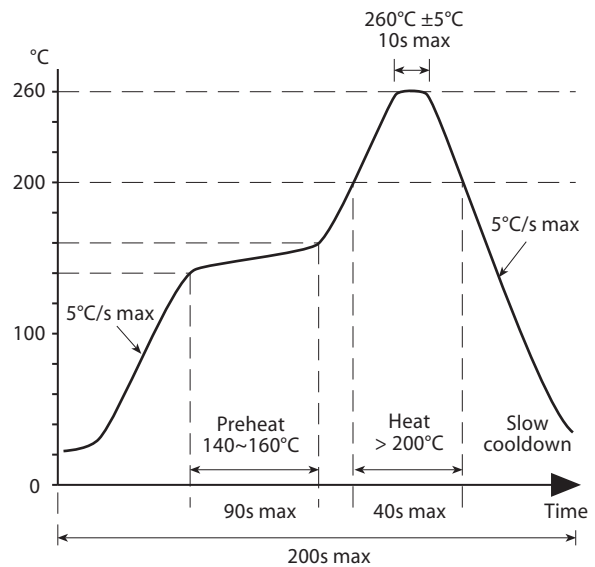
	A	B	C	D	E	F	G	H	J	K	L	M
Y	1	2	3	4	5	6	7	8	9	0		
M	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

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.