

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

Features

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

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 | ■ | ■ | |
| 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 | ■ | ■ | |
| 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}): +2.4V ~ +5.5V (see note) | ■ | ■ | |
| 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, +DC offset | ■ | ■ | |
| Test load (Z _L): 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 | ■ | ■ | |
| Frequency tolerance @ 25°C: ±2.0ppm max, 60mins after reflow | ■ | ■ | |

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

Ordering Information

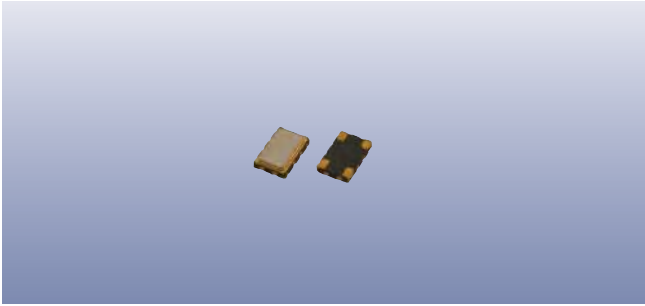
Product name + variant + option codes + frequency
Option codes must be included to properly specify a model.

eg: **GTXO-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.

♦ Will operate within specification on any supply voltage from +2.4V to +5.5V.



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

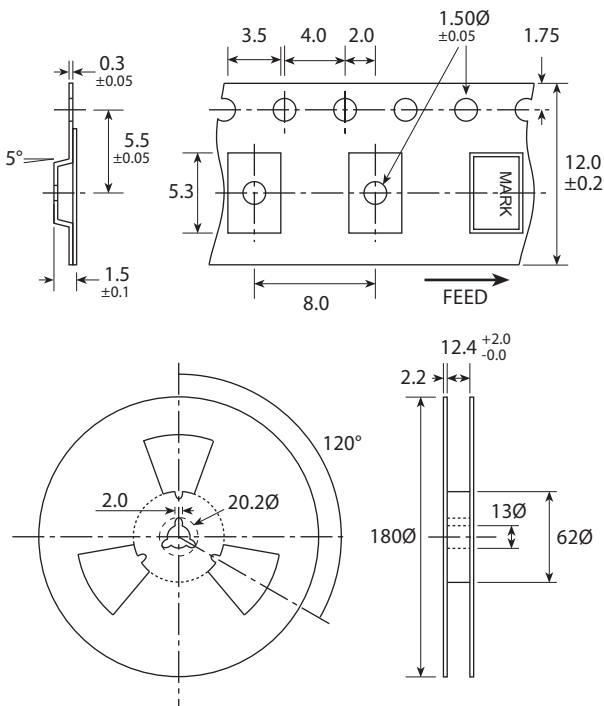
Marking

Marking type: Laser
DC = Date code in YM, eg "CE" = May 2013

| | |
|-----------|----|
| 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

Construction

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

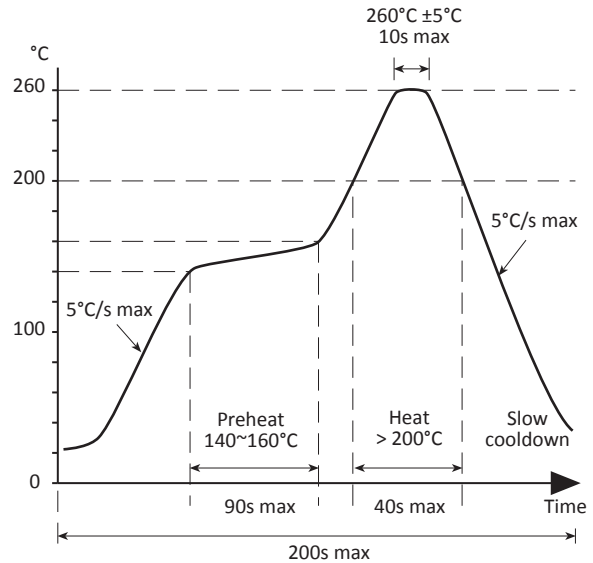
Composition



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



Soldering Profile



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