

Product Description

| | |
|-----------------|--------------------------------------|
| Description: | 24.5760MHz GXO-7506L/A SM Oscillator |
| Product family: | GXO-7506 |
| Category: | SM Oscillator |
| Order code: | MP07692 |

Features

- ▶ Excellent phase noise & jitter characteristics
- ▶ Enable / disable tristate function

Additional Information

For further information regarding packaging, construction, material composition, soldering profile and environment, please refer to **GXO-7506 Product Information sheet**

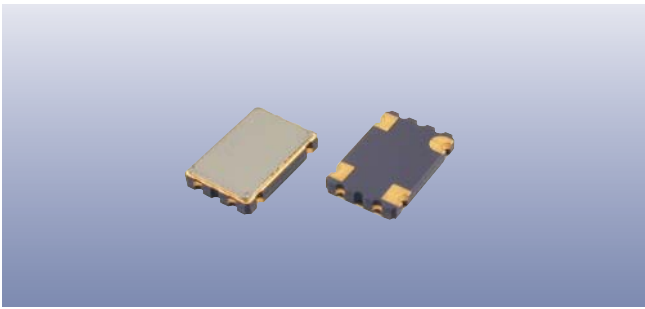
For dimensions, refer to package drawing: **D0135-B**

Electrical Specifications



| Parameter | Value | Notes |
|------------------------------------|--|---|
| Nominal frequency: | 24.5760MHz | |
| Frequency stability: | ±25ppm | Inclusive of calibration @25°C, operating temperature range, supply voltage change, load change, shock & vibration. |
| Operating temperature range: | -40 to +85°C | |
| Storage temperature range: | -55 to +125°C | |
| Supply voltage (V _{DD}): | +3.3V | ±10% |
| Supply current: | 20mA max | |
| Driving ability: | 15pF CMOS | |
| Logic levels: | '0' level = 10%V _{DD} max '1' level = 90%V _{DD} min | |
| Start up time: | 5ms max | |
| Waveform symmetry: | 45:55% max | @50% V _{DD} |
| Rise / fall time: | 5ns max | |
| Enable / disable function: | Tristate | Control via pad 1 |
| Phase jitter RMS: | 0.04ps typ | 12kHz ~ 5.0MHz. For ultimate performance, a high frequency decoupling capacitor should be connected between supply and ground as close to the oscillator supply pad as possible. Low frequency decoupling should be placed next to the supply source. |
| Phase noise: | -101dBc/Hz @10Hz typ -132dBc/Hz @100Hz typ -155dBc/Hz @1kHz typ -166dBc/Hz @10kHz typ -174dBc/Hz @100kHz typ -175dBc/Hz @1MHz typ -175dBc/Hz @5MHz typ | |

Enable / Disable Function

| Input (pad 1) | Output (pad 3) |
|---------------|----------------|
| Open | Enabled |
| '1' level | Enabled |
| '0' level | High Impedance |



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



Packaging & Handling

Production quantities supplied on T&R, 2k pcs per reel.
Small quantities may be supplied on tape (no reel), or in bulk.



♦ Static sensitive product. Observe proper handling precautions

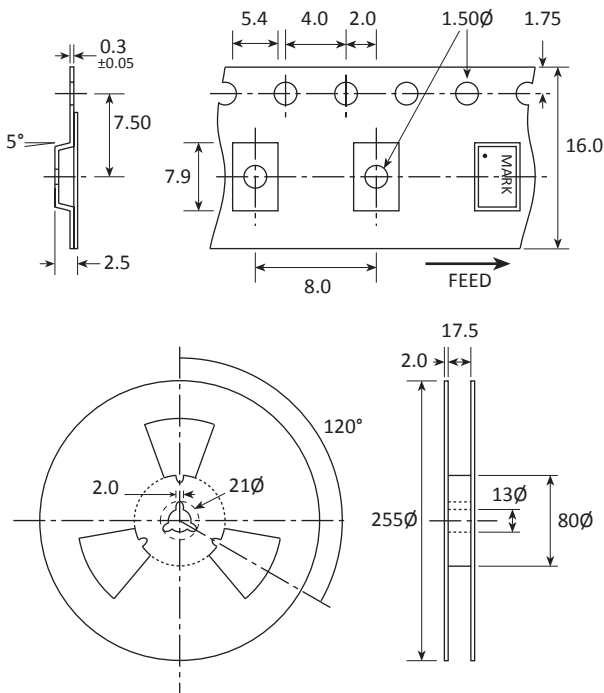
Marking

| | |
|-----------|----|
| FREQUENCY | DC |
| PARTNO | |

- Pin 1
- Marking type: Laser
- DC = Date code in YM, eg "EC" = Mar 2015

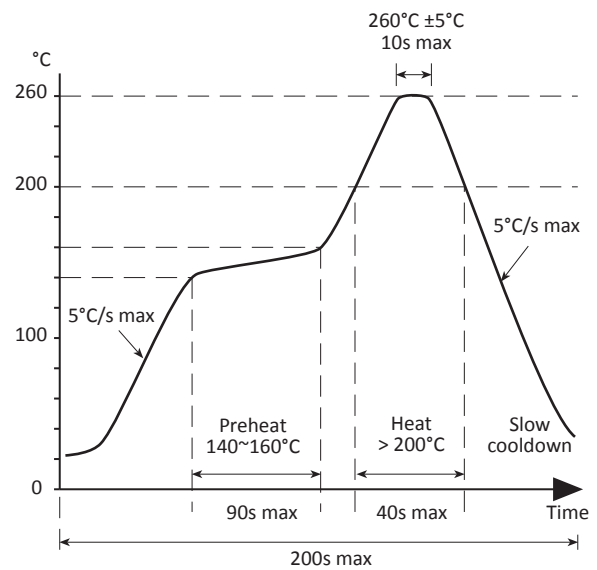
| | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | G | H | J | K | L | M |
| Y | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | |
| M | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |

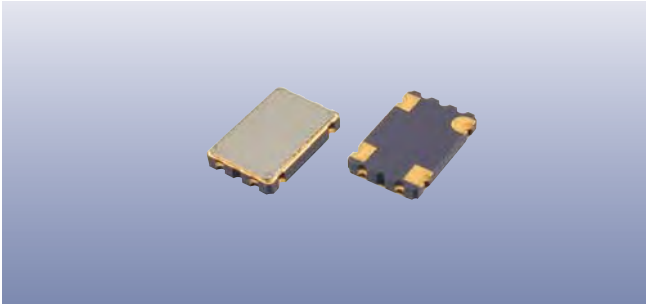
Tape & Reel Specification



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

Soldering Profile





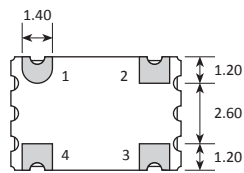
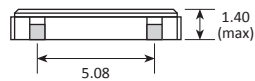
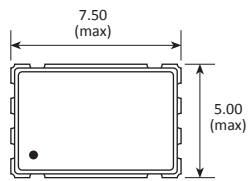
Product Family

GXO-U108, GXO-7506

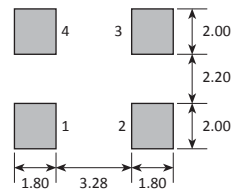
Construction

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

Dimensions (mm)



| PAD | CONNECTION |
|-----|----------------|
| 1 | Enable/Disable |
| 2 | Ground |
| 3 | Output |
| 4 | Supply |



TOP VIEW