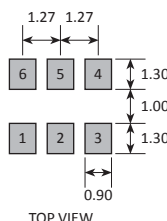


SOLDER PAD LAYOUT



| PAD | CONNECTION |
|-----|------------------------|
| 1 | Enable / disable |
| 2 | Not connected |
| 3 | Ground |
| 4 | Output 1 (Q) |
| 5 | Output 2 (\bar{Q}) |
| 6 | Supply |

Features

- Complementary LV-PECL output
- RMS phase jitter 0.3ps
- Multiplier-free design
- Enable / disable tristate function
- Designed for high speed data transfer

Example Applications

- Networking - 10GbE etc
- Storage - SAS, SATA etc
- Telecomms - SONET, SDH etc
- Free space optics
- Instrumentation

Specifications

GXO-E51L: 3.3V supply

GXO-E51J: 2.5V supply

| Parameters | Variant | | Option Codes |
|---|--------------|------------------|--------------|
| | L | J | |
| Frequency range: 50.0 ~ 60.0MHz (fundamental) 60.0 ~ 160MHz (3rd OT) 160.0 ~ 250MHz (inverted mesa) | ■ | ■ | |
| Frequency stability*: ±100ppm ±50ppm ±25ppm (<160MHz) | ■ □ □ | ■ ■ ■ | B A |
| Operating temperature range: -10 to +70°C -40 to +85°C | ■ □ | ■ ■ | I |
| Storage temperature range: -40 to +85°C | ■ | ■ | |
| Supply voltage (V_{DD}): +3.3V (±5%) +2.5V (±5%) | ■ | ■ | |
| Supply current: 88mA max (50.0~250MHz) | ■ | ■ | |
| Output: Complementary LV-PECL | ■ | ■ | |
| Test load: R _T = 50Ω V _{TT} = V _{DD} -2.0V | ■ | ■ | |
| Logic levels: '0' level (max) '1' level (min) | 1.7V 2.2V | 1.195V 1.415V | |
| Waveform symmetry: 40:60 max @ 50%V _{p-p} | ■ | ■ | |
| Rise / fall time (20 ~ 80%V_{p-p}): 0.7ns max 1.0ns max | ■ | ■ | |
| Enable / disable function: Tristate (control via pad 1) | ■ | ■ | |
| Phase jitter RMS: 1ps max (0.3ps typ), 12kHz~20MHz | ■ | ■ | |

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

* Frequency stability is inclusive of calibration @ 25°C, operating temperature range, supply voltage change and load change.

Ordering Information

Product name + variant + option codes (if any) + frequency

eg: **GXO-E51L 108.0MHz** 3.3V, ±100ppm -10+70°C

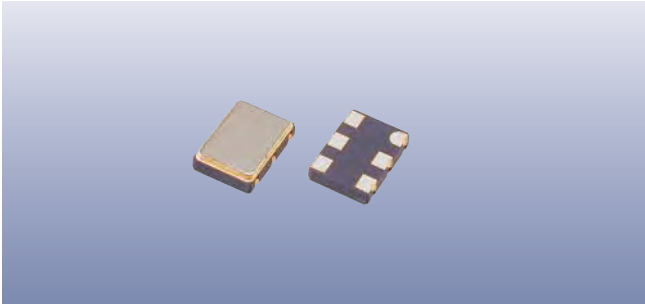
GXO-E51J/BI 125.0MHz 2.5V, ±50ppm -40+85°C

Option code X (eg GXO-E51L/X) denotes a custom spec.

Enable / Disable Function

| Input (pad 1*) | Output 1 (pad 4) | Output 2 (pad 5) |
|----------------------------------|------------------|------------------|
| Open | Enabled | Enabled |
| '1' level (≥0.7V _{DD}) | Enabled | Enabled |
| '0' level (≤0.3V _{DD}) | High Impedance | High Impedance |

* Enable / disable function can be on pad 2 on request.



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

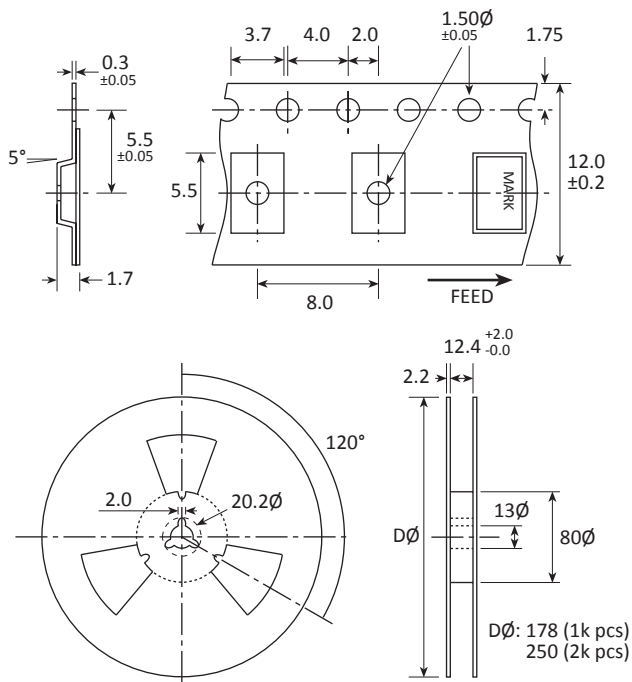
Marking

FREQUENCY DC
• PARTNO

- Pin 1
- Marking type: Laser
- DC = Date code in YM, eg "DE" = May 2014

| | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 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 current RoHS directives 

Soldering Profile

