

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

Features

- Differential outputs
- RMS phase jitter 0.3ps
- Low current consumption (20mA max)
- 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-L31L: 3.3V supply

GXO-L31J: 2.5V supply

Parameters	Variant		Option Codes
	L	J	
Frequency range: 40.0 ~ 60.0MHz (fundamental) 60.0 ~ 160MHz (3rd OT) 160 ~ 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: 20mA max	■	■	
Output: LVDS	■	■	
Offset voltage: 1.25V typ	■	■	
Differential output voltage: 0.247 ~ 0.454V (0.33V typ)	■	■	
Output load: 100Ω	■	■	
Waveform symmetry: 45:55 max @ 50%V _{p-p}	■	■	
Rise / fall time: 0.4ns max (20 ~ 80%V _{p-p})	■	■	
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-L31L 108.0MHz** 3.3V, ±100ppm -10+70°C

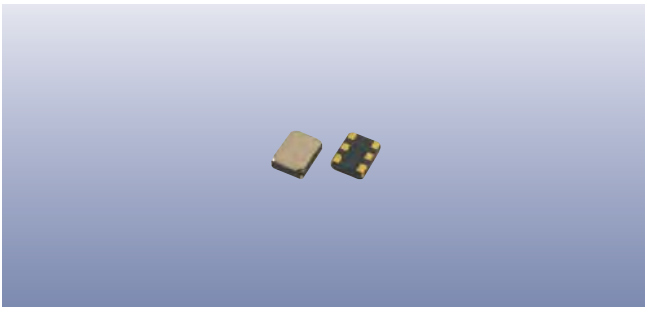
GXO-L31J/BI 125.0MHz 2.5V, ±50ppm -40+85°C

Option code X (eg GXO-L31L/X) denotes a custom spec.

Enable / Disable Function

Input (pad 1*)	Output 1 (pad 4)	Output 2 (pad 5)
Open	Enabled	Enabled
'1' level ($\geq 0.7V_{DD}$)	Enabled	Enabled
'0' level ($\leq 0.3V_{DD}$)	High Impedance	High Impedance

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



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

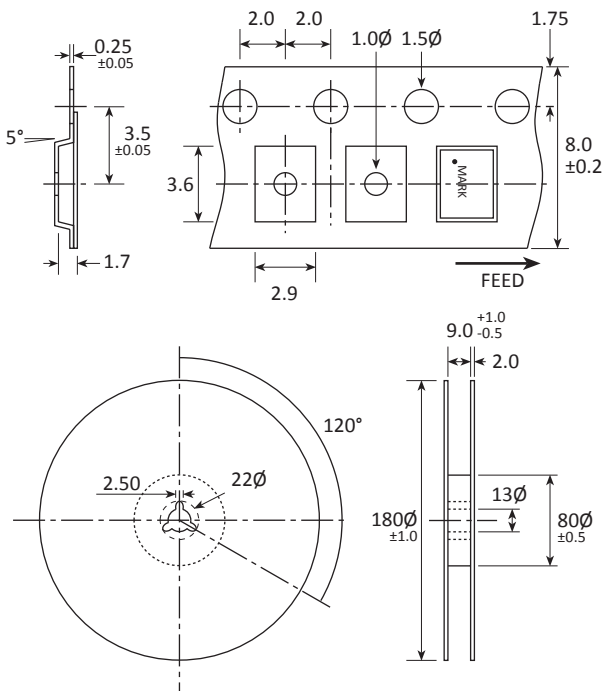
Marking

FREQUENCY DC
• PARTNO

- Pin 1
- Marking type: Laser
- DC = Date code in YM, eg "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 ± 0.1 mm unless otherwise stated.

Soldering Profile

