

PAD	CONNECTION
1	Control voltage
2	Enable / disable
3	Ground
4	Output 1 (Q)
5	Output 2 ( $\bar{Q}$ )
6	Supply

## Features

- ▶ Complementary LVDS outputs
- ▶ Multiplier-free design
- ▶ Enable / disable tristate function
- ▶ Designed for high speed data transfer

## Example Applications

- ▶ Networking - Gigabit ethernet etc
- ▶ Storage - SAS, SATA etc
- ▶ Telecomms - SONET, SDH etc
- ▶ Computing
- ▶ Instrumentation

## Specifications

Parameters	Variant	Option Codes
	L	
<b>Frequency range:</b> 40.0 ~ 250MHz	■	
<b>Voltage control (<math>V_{CTL}</math>):</b> +1.65V ±1.50V, 10% linearity	■	
<b>Frequency pullability (min):</b> ±50ppm Other	■ □	specify
<b>Frequency stability*:</b> ±50ppm ±25ppm Other	■ □ □	B C specify
<b>Operating temperature range:</b> -10 to +70°C -40 to +85°C	■ □	I
<b>Storage temperature range:</b> -40 to +85°C	■	
<b>Supply voltage (<math>V_{DD}</math>):</b> +3.3V (±5%)	■	
<b>Supply current:</b> 25mA max	■	
<b>Output:</b> LVDS	■	
<b>Offset voltage:</b> 1.25V typ	■	
<b>Differential output voltage:</b> 0.35V typ	■	
<b>Waveform symmetry:</b> 45:55 max @ 50% $V_{P-P}$	■	
<b>Rise / fall time:</b> 0.4ns max (20% ~ 80% $V_{P-P}$ )	■	
<b>Phase jitter:</b> 1ps max (12kHz ~ 20MHz)	■	
<b>Enable / disable function:</b> Tristate (control via pad 2)	■	

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

\* Frequency stability is inclusive of operating temperature range, supply voltage change and ageing, with  $V_{CTL} = +1.65V$

## Ordering Information

Product name + variant + option codes + frequency

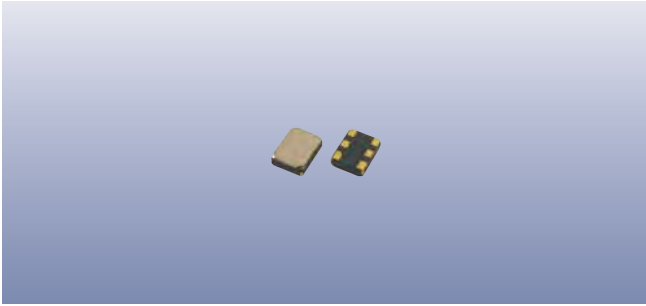
eg: **GVXO-L33L/C 156.250MHz** ±25ppm -10+70°C

**GVXO-L33L/BI 125.0MHz** ±50ppm -40+85°C

Option code X (eg GVXO-L33L/X) denotes a custom spec.

## Enable / Disable Function

Input (pad 2)	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



## 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

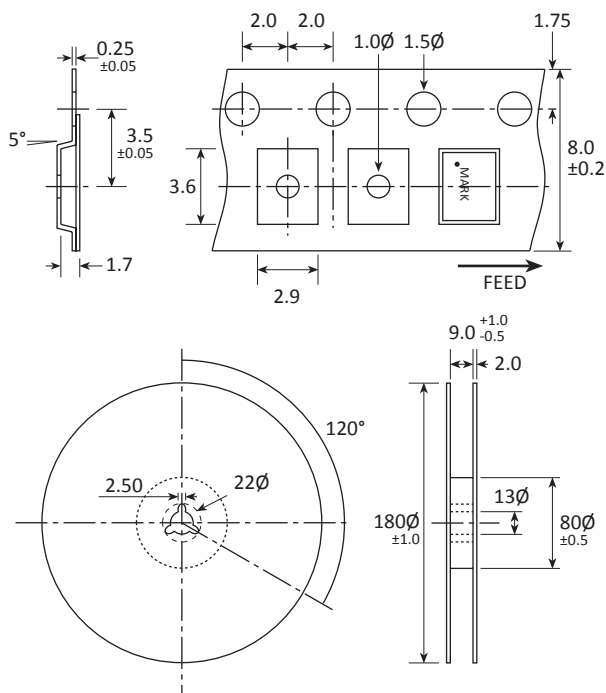
## Marking

FREQUENCY DC  
• PARTNO

• Pin 1  
Marking type: Laser  
DC = Date code in YM, eg "FE" = May 2016

	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  $\pm 0.1$ mm 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

