

PAD	CONNECTION
1	Control voltage
2	Ground
3	Output
4	Supply

Scale 3:1

**Features**

- ▶ **3.3V supply**
- ▶ **Fundamental mode crystal up to 54.0MHz**
- ▶ **Choice of pullability & stability**
- ▶ **Miniature SM package**

**Specifications**

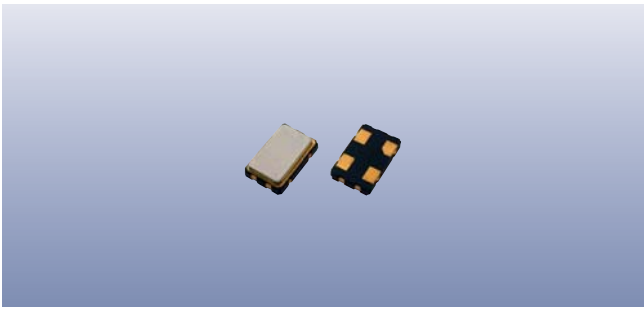
Parameters	Product	Option Codes
	GVXO-523	
Frequency range: 1.50 ~ 54.0MHz	■	
Voltage control: +1.65V ±1.50V, 10% linearity	■	
Frequency pullability (min): ±100ppm (<30MHz only) ±80ppm ±50ppm Other	■ ■ □ □	S P N specify
Frequency stability: ±50ppm ±25ppm Other	■ □ □	B C specify
Operating temperature range: -20 to +70°C -40 to +85°C	■ □	I
Storage temperature range: -40 to +85°C	■	
Supply voltage (V <sub>DD</sub> ): +3.3V (±10%)	■	
Supply current: 10mA max (1.5 ~ 20.0MHz) 15mA max (>20.0 ~ 30.0MHz) 20mA max (>30.0 ~ 40.0MHz) 25mA max (>40.0MHz)	■ ■ ■ ■	
Driving ability: 15pF CMOS	■	
Logic levels: '0' level = 10%V <sub>DD</sub> max '1' level = 90%V <sub>DD</sub> min	■ ■	
Waveform symmetry: 45:55 max @ 50%V <sub>DD</sub>	■	
Rise / fall time (10%~90%V <sub>DD</sub> ): 10ns max (1.5 ~ 10.0MHz) 6ns max (>10.0MHz)	■ ■	
Start up time: 10ms max	■	
Period jitter RMS: 6 ps max	■	
Phase jitter RMS: 1ps max, 12kHz ~ 20MHz	■	
Phase noise (typ): -130dBc/Hz @ 1kHz	■	
Ageing: ±5ppm / year max	■	

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

**Ordering Information**

Product + option codes + frequency  
 eg: **GVXO-523/SC 27.0MHz** ±100ppm pull, ±25ppm stab, -10+70C  
**GVXO-523/PBI 35.3280MHz** ±80ppm pull, ±50ppm stab, -40+85C  
 Option codes must be included to specify a model completely.  
 Option code X (eg GVXO-523/X) denotes a custom spec.

◆ Please check availability of ±25ppm stability over -40+85°C before ordering



## 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 2002/95/EC



## 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

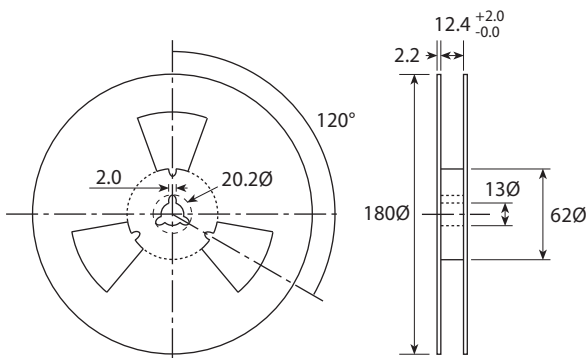
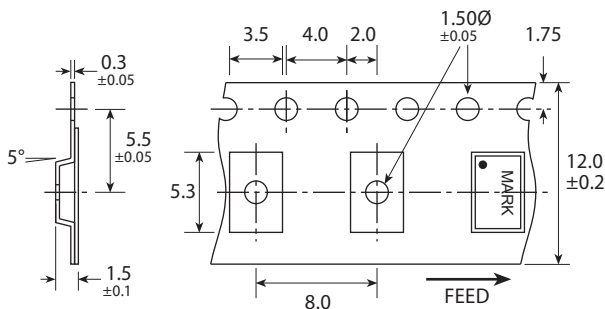
## Marking

FREQUENCY  
• PARTNO DC

• Pin 1  
Marking type: Laser  
DC = Date code in YM, eg "CE" = May 2003

	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

