

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

Specifications

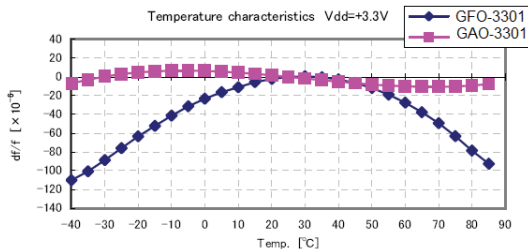
Parameters	Product	Option Codes
	GFO-3301	
Frequency:	32.768kHz	■
Frequency tolerance @ 25°C: +5ppm ±20ppm		■
Temperature stability (wrt 25°C): -90ppm~+10ppm, -20~+70°C -140ppm~±10ppm, -40~+85°C		■ ■
Operating temperature range: -40 to +85°C		■
Storage temperature range: -55 to +125°C		■
Supply voltage (V _{DD}): Operable from +1.5 ~ +5.5V		■
Supply current (max): 1.5µA max (3.3V, no load)		■
Standby current (max): 1.0µA max		■
Driving ability: 15pF CMOS		■
Logic levels: '0' level = 0.4V max '1' level = V _{DD} -0.4V min		■ ■
Start up time: 1s max		■
Waveform symmetry: 40:60 @ 50%V _{DD}		■
Rise / fall time: 20ns typ, 200ns max		■

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

Features

- ▶ Extremely low current consumption
- ▶ Operational from 1.5V ~ 5.5V
- ▶ Tuning fork resonator
- ▶ Miniature ceramic package with metal lid
- ▶ Competitive pricing

Temperature Characteristics vs GAO-3301



- ◆ GAO-3301 offers good temp stability, but draws higher current
- ◆ GFO-3301 draws very low supply current, but looser stability

Ordering Information

Product name or Golledge PN.

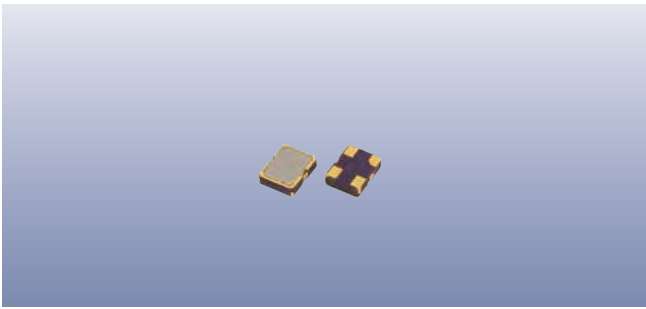
ie: **GFO-3301**

or **MP05295**

Option code X (eg GFO-3301/X) denotes a custom spec.

Enable / Disable Function

Input (pad 1)	Output (pad 3)
Open	Enabled
'1' level (V _{IH} = 70% V _{DD} min)	Enabled
'0' level (V _{IL} = 30% V _{DD} max)	High Impedance



Construction

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

Composition



This product is lead-free, and is fully compliant with the RoHS 2 directive 2011/65/EU



Packaging & Handling

Production quantities supplied on T&R, 1k or 3k pcs per reel. Small quantities may be supplied on tape (no reel), or in bulk.



◆ Static sensitive product. Observe proper handling precautions

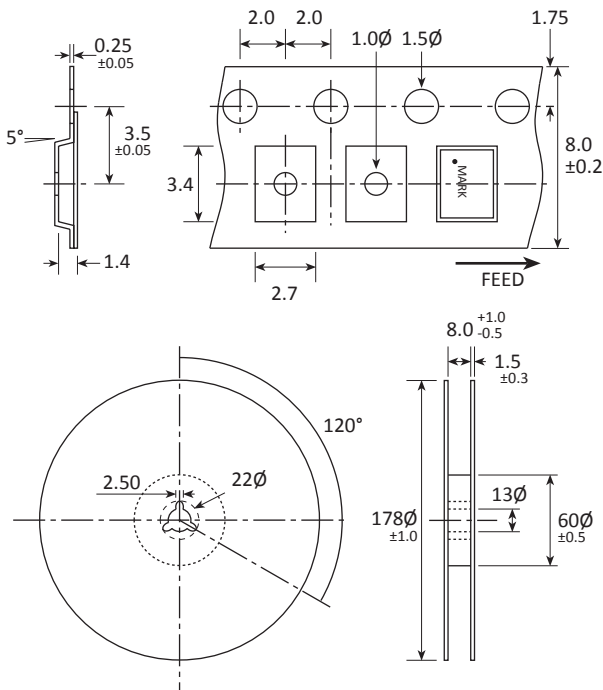
Marking

FREQUENCY
DC

Marking type: Laser
DC = Date code in YM, eg "CE" = May 2013

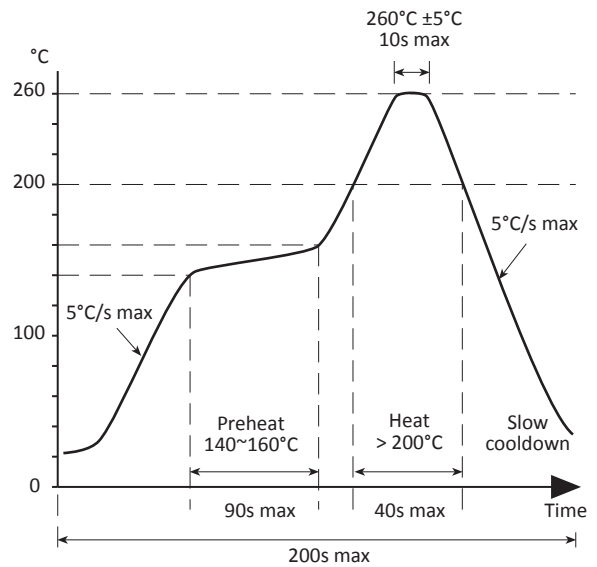
	A	B	C	D	E	F	G	H	J	K	L	M
Y	1	2	3	4	5	6	7	8	9	0		
M	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Tape & Reel Specification



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

Soldering Profile



Solder resistance: 260°C x 10 secs x 2.