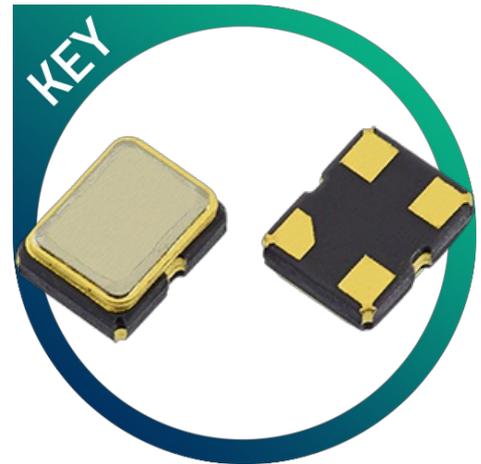


# GAO-3201

## 1.8~5.0V 32.768kHz Oscillator

- Excellent temperature stability
- Low current consumption
- AT-cut resonator + dividing circuit
- Miniature ceramic package with metal lid
- Competitive pricing

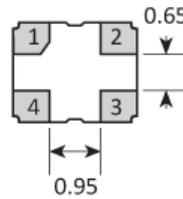
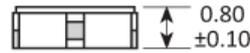
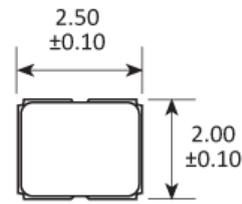
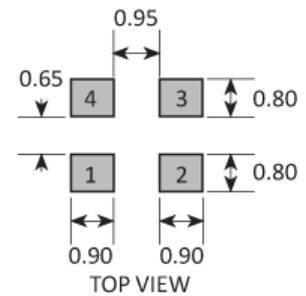


### CONFIGURABLE OPTIONS

Parameter	Option Code
Frequency stability	
±25ppm	A
Operating temperature range	
-40 to +85°C	I

**SPECIFICATIONS**

Frequency	32.768kHz
Dimensions	2.5 x 2.0 x 0.9mm
Storage temperature range	-55 to +125°C
Supply voltage ( $V_{DD}$ )	Operable from +1.8 ~ +5.0V
Supply current (@ 15pF)	0.108mA typ, 0.200mA max (1.8V) 0.117mA typ, 0.200mA max (3.3V)
Driving ability	15pF CMOS
Logic levels	'0' level = 10% $V_{DD}$ max '1' level = 90% $V_{DD}$ min
Waveform symmetry	45:55 @ 50% $V_{DD}$
Rise / fall time	13ns typ, 100ns max, 10 ~ 90% $V_{DD}$
Start up time	10ms max
Stand-by current	2 $\mu$ A typ, 10 $\mu$ A max
Ageing	$\pm$ 5ppm/yr max @ 25°C

**PACKAGE DRAWING**

**SOLDER PAD LAYOUT**


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

Dimensions in mm

## ORDERING INFORMATION

To request a quotation for the GAO-3201 please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at [sales@golledge.com](mailto:sales@golledge.com).

Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## 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

## MARKING

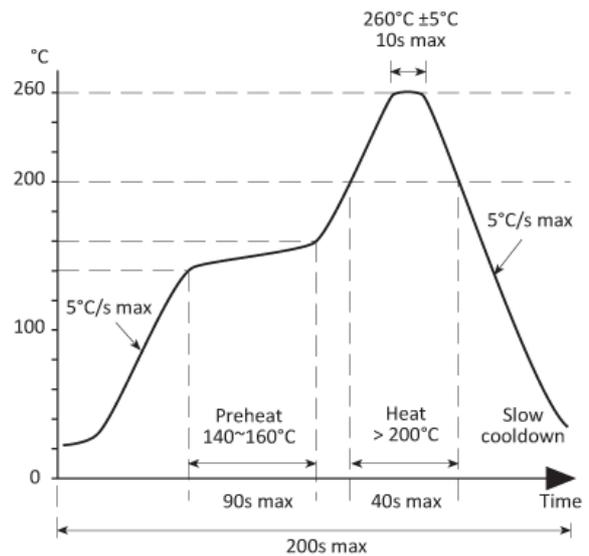
FREQUENCY	
S	DC

Marking type: Laser

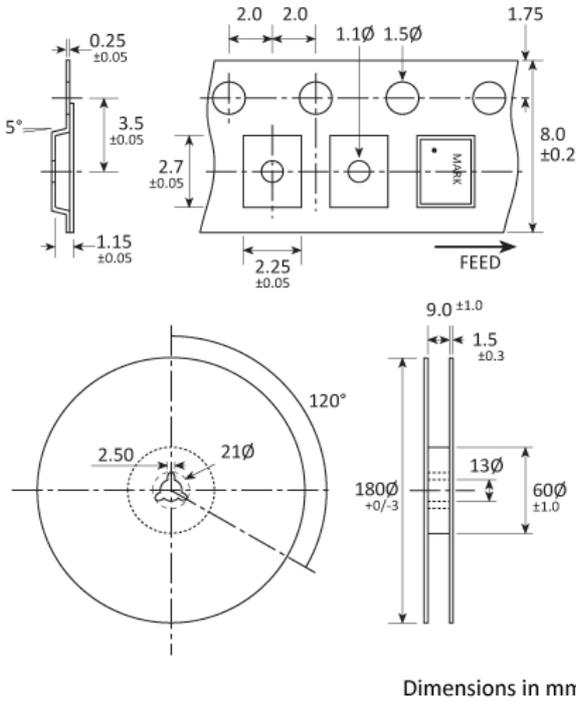
DC = Date code in YM, where Y is numeric, and M is a letter  
e.g. "8F" = June 2018

	A	B	C	D	E	F	G	H	J	K	L	M
M	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

## SOLDERING PROFILE



**TAPE & REEL SPECIFICATION**



**HANDLING & STORAGE**



Human Body Model (HBM) 1A (250V to <500V)



Moisture Sensitivity Level (MSL): 1 (or not applicable)

**CONSTRUCTION**

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

**COMPLIANCE**

Please refer to our **DOCUMENTS** section for more information.



Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions.



REACH compliant.



Free of conflict minerals.



Free from halogens.



Free from ozone-depleting substances.