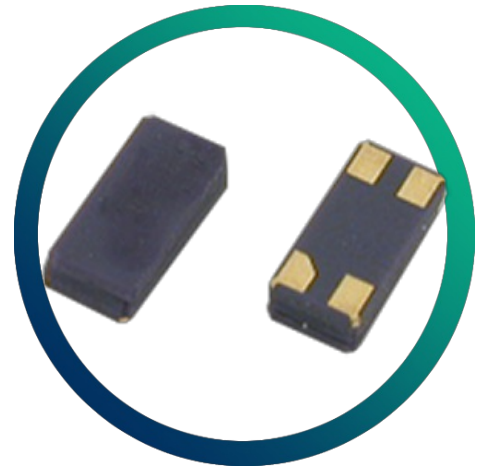


# OV7604C7

## Low Power 32.768kHz SM Oscillator

- Ultra low power consumption
- Fully ceramic 32.768kHz oscillator
- Tight frequency tolerance
- Industrial and extended temperature ranges
- High shock and vibration resistance

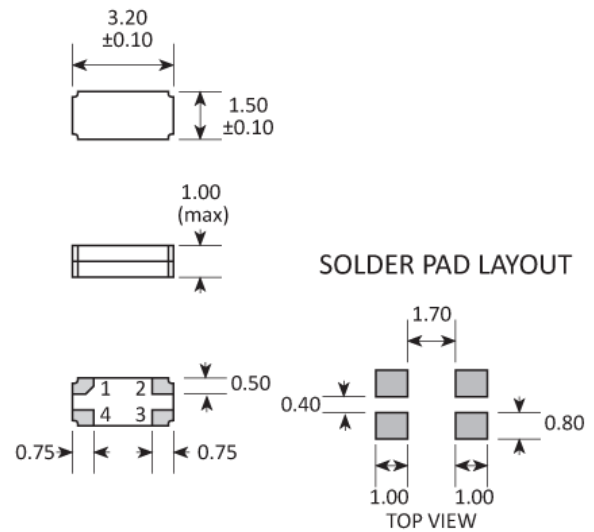


### CONFIGURABLE OPTIONS

| Parameter                   | Option Code |
|-----------------------------|-------------|
| Calibration tolerance       |             |
| ±20ppm max                  | B           |
| Operating temperature range |             |
| Any                         |             |
| -40 to +85 °C               |             |
| -40 to +125 °C              | E           |
| Qualification               |             |
| Any                         |             |
| Commercial                  |             |
| AEC-Q200 (Automotive)       | A           |

**SPECIFICATIONS**

|  |  |
|--|--|
| Frequency                              | 32.768kHz  |
| Dimensions                             | 3.2 x 1.5 x 1.0mm  |
| Turnover temperature (T <sub>0</sub> ) | +25°C ±5°C   |
| Frequency / temp coefficient           | -0.035ppm/°C <sup>2</sup> ±10%                                 |
| Storage temperature range              | -55 to +125°C  |
| Supply voltage (V <sub>DD</sub> )      | Operable from 1.2 ~ 5.5V                                       |
| Supply current (backup mode)           | 0.3µA typ, 0.5µA max (V <sub>DD</sub> 3.0V, output disabled)   |
| Logic levels                           | '0' level = +0.4V max<br>'1' level = V <sub>DD</sub> -0.4V min |
| Waveform symmetry                      | 40:60 max @ 50%V <sub>DD</sub>                                 |
| Driving ability                        | CMOS   |
| Voltage coefficient                    | ±1.5ppm/V max  |
| Rise / fall time                       | 70ns typ, 100ns max  |
| Start up time                          | 500ms max @ 25°C   |
| Enable / disable function              | Control via pad 3  |
| Ageing                                 | ±3ppm max first year @ 25°C                                    |
| Shock resistance                       | ±5ppm, 5,000g, 0.3ms ½-sine                                    |
| Vibration resistance                   | ±5ppm, 20g rms 10.0 ~ 2,000Hz                                  |
| Soldering condition                    | Reflow, 260°C, 20 sec max                                      |
| Net mass                               | 12.3mg   |

**PACKAGE DRAWING**


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

Dimensions in mm

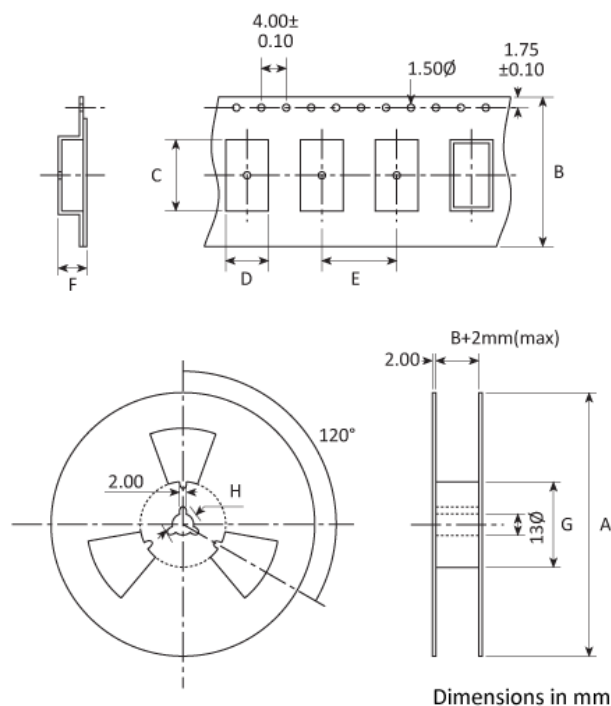
## ORDERING INFORMATION

To request a quotation for the OV7604C7 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.

## TAPE & REEL SPECIFICATION



A:178 / B:12 / C:3.5 / D:1.8 / E:4 / F:1.1 / G:61 / H:21

## ENABLE / DISABLE FUNCTION

| Input (pad 3) | Output (pad 1) |
|---------------|----------------|
| '1' level     | Enabled        |
| '0' level     | Disabled       |

Note: Pad 3 should not be allowed to float

## HANDLING & STORAGE



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



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

## CONSTRUCTION

Ceramic base and lid

## 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.

## BLOCK DIAGRAM

