

# 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



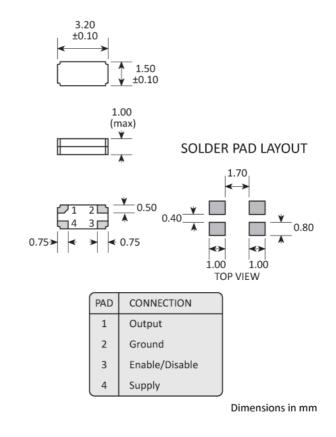
CONFIGURABLE OPTIONS	
Parameter	Option Code
Calibration tolerance	
±20ppm max	В
Operating temperature range	
Any	
-40 to +85°C	
-40 to +125°C	E
Qualification	
Any	
Commercial	
AEC-Q200 (Automotive)	А



## **SPECIFICATIONS**

F	22.760 .  -
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	0.3µA typ, 0.5µA max
mode)	(V <sub>DD</sub> 3.0V, output disabled)
Logic levels	'0' level = +0.4V max
	'1' level = V <sub>DD</sub> -0.4V min
Waveform symmetry	40:60 max @ 50%V <sub>DD</sub>
Driving ability	10pF CMOS
Voltage coefficient	±1.5ppm/V max
Rise / fall time	70ns typ, 100ns max
Start up time	500ms max @ 25°C
Enable / disable	Control via pad 3
function	
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

## **PACKAGE DRAWING**



## 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 <a href="mailto:sales@golledge.com">sales@golledge.com</a>.

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 3)	Output (pad 1)
'1' level	Enabled
'0' level	Disabled

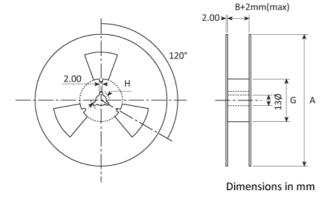
Note: Pad 3 should not be allowed to float





## **TAPE & REEL SPECIFICATION**

## 4.00± 0.10 1.75 ±0.10 C



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

## **HANDLING & STORAGE**



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



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

## **CONSTRUCTION**

Ceramic base and lid

## **MATERIAL COMPOSITION**



Lead-free (< 0.1% by weight)



RoHS 2 compliant with no exemptions. See

See our

declaration



REACH compliant. See our statement



Free of conflict minerals. See our declaration



Free of Halogens. <u>See our declaration</u>



Free of Ozone-depleting substances. <u>See our</u>

<u>declaration</u>

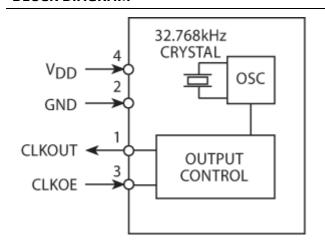


Nominal Net Mass: 12.4mg





## **BLOCK DIAGRAM**





## OTHER INFORMATION

## **About Golledge**

We are the UK's leading supplier of frequency control products and are proud to serve the global electronics industry. Our philosophy is a focus firmly on your requirements by striving to meet and exceed your needs. We do this by ensuring the utmost quality and consistency in our products and services. If you have any queries about the Golledge service or any of our products please get in touch, we'd love to hear from you.

#### Come and visit

#### Give us a call

#### Email us

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Our customer feedback is testament to our quality; "Never had such good service as this from anyone in 35 years of being in the industry, this is impressive and has really helped us out of a corner to keep the design flowing" Andy (Senior Design Engineer), "As always your support is state of the art" Nicoleta (Material Management), "Legendary work - as usual it has to be said" John (Operations).

To take advantage of our highly praised service get in touch with us today.