

OV0100C8

Fully ceramic 100kHz SM Oscillator

- Fully ceramic package
- Ultra low power consumption
- Optional AEC-Q200 qualification
- Ultra-miniature
- High shock and vibration resistance



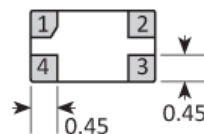
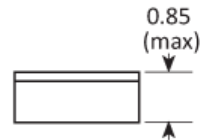
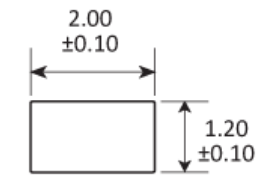
CONFIGURABLE OPTIONS

Parameter	Option Code
Calibration tolerance	
±100ppm max	
Qualification	
Any	
Commercial	
AEC-Q200 (Automotive)	A

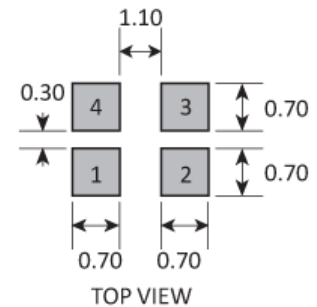
SPECIFICATIONS

Frequency	100kHz
Dimensions	2.0 x 1.2 x 0.85mm
Operating temperature range	-40 to +85 °C
Turnover temperature (T ₀)	+28 °C ±5 °C
Frequency / temp coefficient	-0.035ppm/°C ² ±10%
Storage temperature range	-55 to +125 °C
Supply voltage (V _{DD})	Operable from 1.6 ~ 5.5V
Supply current (backup mode)	0.55µA typ, 0.75µA max (V _{DD} 3.0V, output disabled)
Logic levels	'0' level = +0.4V max '1' level = V _{DD} -0.4V min
Waveform symmetry	40:60 max @ 50%V _{DD}
Driving ability	CMOS
Voltage coefficient	±3ppm/V max
Rise / fall time	30ns typ, 70ns max
Start up time	50ms typ, 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	6.0mg

PACKAGE DRAWING



SOLDER PAD LAYOUT



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

Dimensions in mm

ORDERING INFORMATION

To request a quotation for the OV0100C8 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.

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.

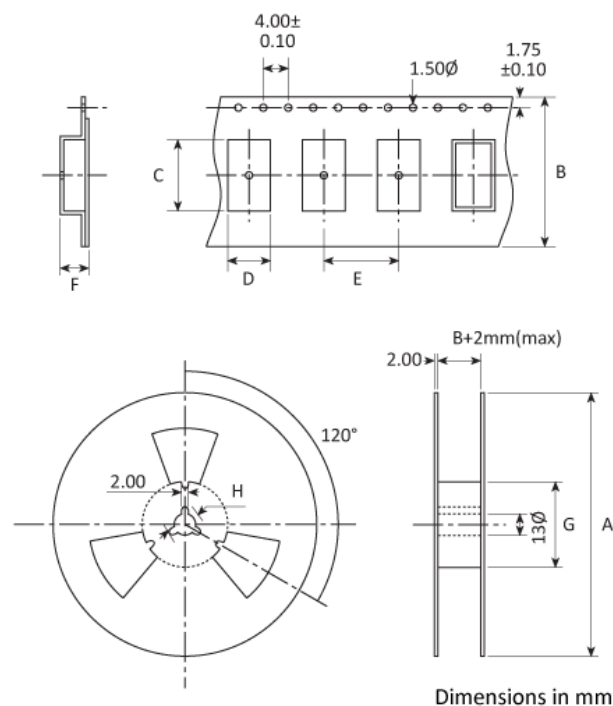
If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

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



A:178 / B:8 / C:2.3 / D:1.5 / E:4 / F:0.9 / G:61.5 / H:21

HANDLING & STORAGE



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



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

CONSTRUCTION

Full ceramic package

COMPLIANCE



Lead-free (< 0.1% by weight)



RoHS compliant with no exemptions. [See our declaration](#)



REACH compliant. [See our statement](#)



Free of conflict minerals. [See our declaration](#)



Free of Halogens. [See our declaration](#)



Free of Ozone-depleting substances. [See our declaration](#)

BLOCK DIAGRAM

