

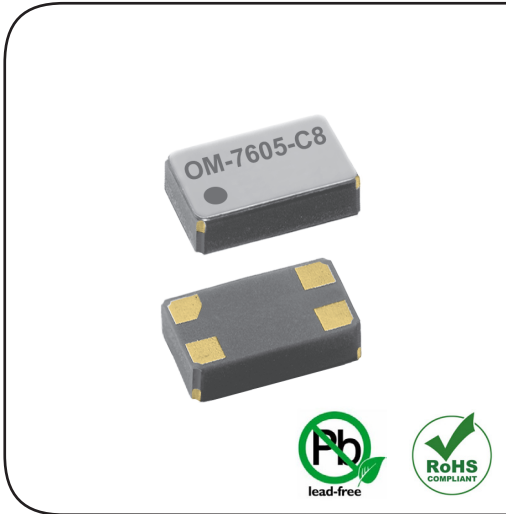


**THE DATASHEET OF
OM-7605-C8-32.768KHZ-20PPM-TA-QC**

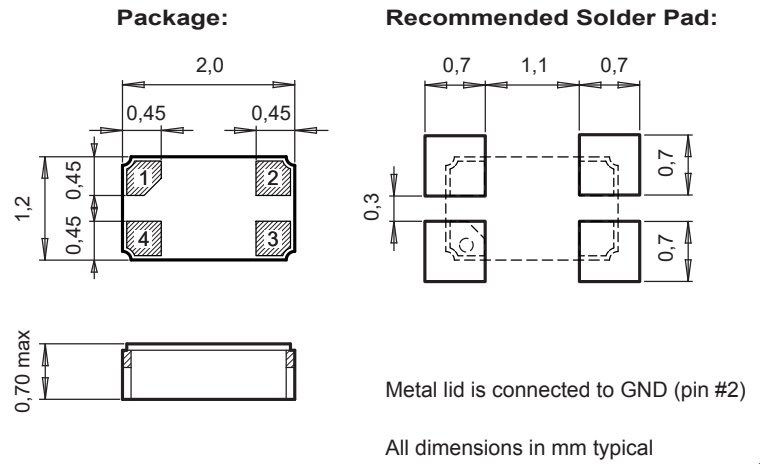


OM-7605-C8

Low Power Clock Oscillator 32.768 kHz



DIMENSIONS



APPLICATIONS

IoT
 Metering
 Industrial
 Automotive
 Health Care
 Wearables, Portables

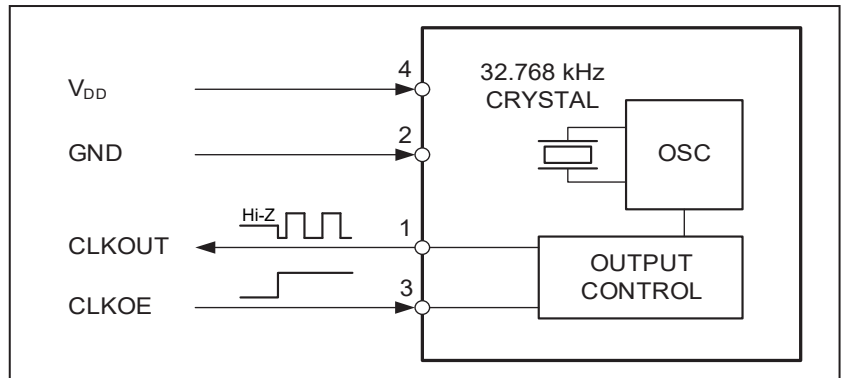
DESCRIPTION

The OM-7605-C8 is a Low Frequency SMD Oscillator that incorporates an integrated CMOS circuit together with an XTAL. It operates under vacuum in a hermetically sealed ceramic package with metal lid.

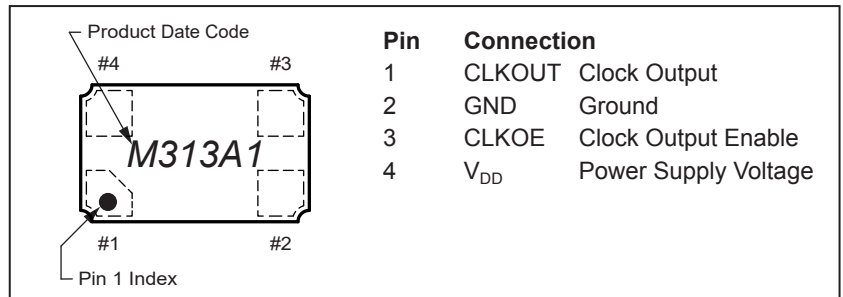
FEATURES

- Wide supply voltage range.
- Very low power consumption.
- CLKOUT enable/disable.
- Small size, low profile, lightweight (5.1 mg).
- High shock and vibration resistant.
- 100% Pb-free, RoHS-compliant.
- Automotive qualification according to AEC-Q200 available.

BLOCK DIAGRAM



PIN CONNECTIONS TOP VIEW



ELECTRICAL CHARACTERISTICS AT 25°C

More detailed information can be found in the Application Manual.

Output Frequency	F	32.768	kHz
Frequency tolerance	¹⁾ ΔF/F	±20	ppm
Supply voltage	V _{DD}	1.6 – 5.5	V
Current consumption (typ./max.)	²⁾ I _{DD}	0.45 / 0.65	μA
Duty cycle (min./max.)		40 / 60	%
Start up time (max.)	t _{start}	0.5	s
Voltage coefficient (max.)		±3	ppm/V
Aging first year max. @ 25°C	ΔF/F	±3	ppm
Turnover temperature (typ.)	T ₀	25 ±5	°C
Frequency vs. temperature	ΔF/F ₀	-0.035 ppm/°C ² (T - T ₀) ² ±10%	ppm

1) Tighter tolerances on request.

2) V_{DD} = 3.0 V, CLKOE = LOW.

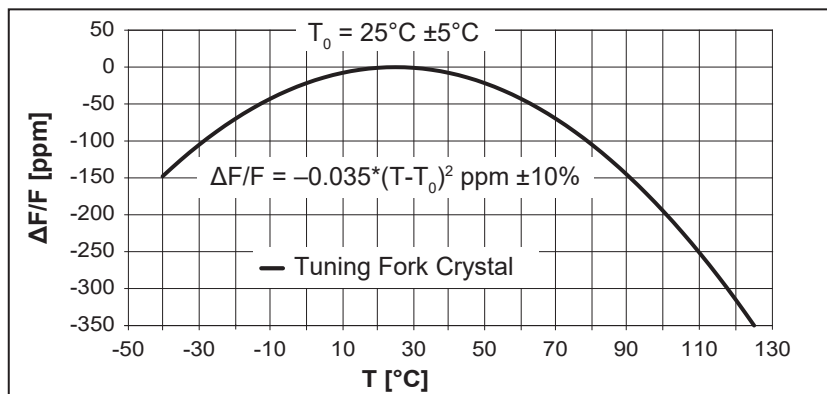
ENVIRONMENTAL CHARACTERISTICS

	Conditions	Max. Dev.
Storage temperature range	-55 to +125°C	
TA Operating temperature range	-40 to +85°C	
TB Extended oper. temp. range	-40 to +125°C	
Shock resistance	ΔF/F 5000 g, 0.3 ms, ½ sine	±5 ppm
Vibration resistance	ΔF/F 20 g / 10–2000 Hz	±5 ppm

TERMINATIONS AND PROCESSING

Package	Termination	Processing
SON-4	Au flashed pads	IPC/JEDEC J-STD-020C 260°C / 20 - 40 s

FREQUENCY TEMPERATURE CHARACTERISTICS



ORDERING INFORMATION

O M - 7605 - C8 ±20 ppm TA QC

<p>Oscillator</p> <p>Metal lid</p> <p>Frequency 7605 = 32.768 kHz</p> <p>Package size C8 = 2.0 x 1.2 x 0.70 mm</p>	<p>Qualification QC = Commercial Grade (Standard) QA = Automotive Grade AEC-Q200</p> <p>Temperature range TA = -40 to +85°C (Standard) TB = -40 to +125°C</p> <p>Frequency tolerance ±20 ppm Tighter freq. tolerances on request</p>
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A unique part number will be generated for each product specification, i.e:	
20xxxx-MC01	1'000 pcs (in 8 mm tape on 7" reel)
20xxxx-MC03	3'000 pcs (in 8 mm tape on 7" reel)

All specifications subject to change without notice.



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Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View OM-7605-C8-32.768KHZ-20PPM-TA-QC on WIN SOURCE](#)
- ⊖ [Micro Crystal AG Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management