



kHz RANGE CRYSTAL UNIT

FC1610AN

- Frequency range : 32.768 kHz
- External dimensions : 1.65 × 1.05 × 0.5 mm
- Overtone order : Fundamental
- Applications : Small communications devices

Product Number
X1A000121xxxx00

Specifications (characteristics)

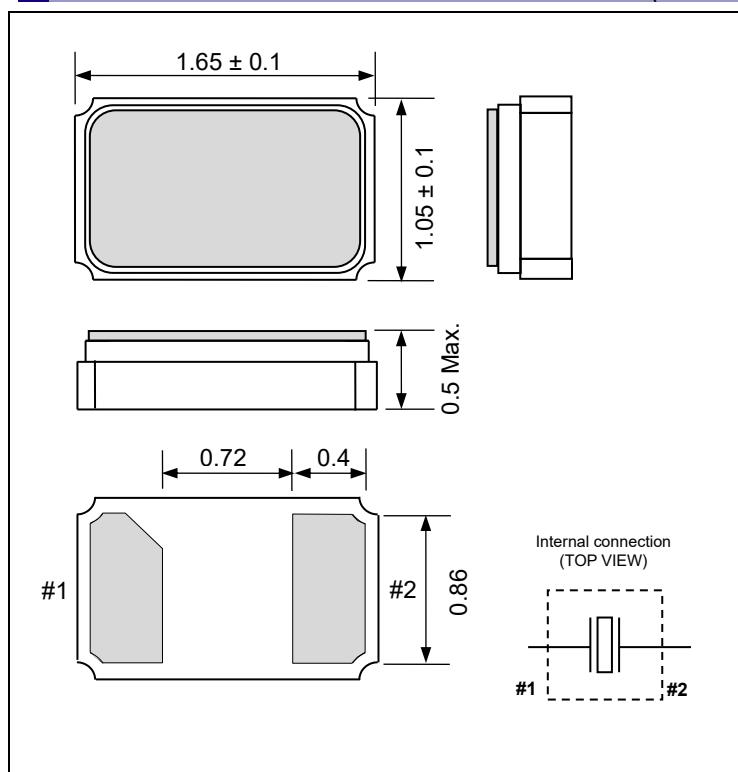
Item	Symbol	Specifications	Conditions / Remarks
Nominal frequency range	f_{nom}	32.768 kHz	
Storage temperature range	T_{stg}	-55 °C to +125 °C	Storage as single product.
Operating temperature range	T_{use}	-40 °C to +85 °C	
Level of drive	DL	0.1 μW Typ. (0.5 μW Max.)	
Frequency tolerance (standard)	f_{tol}	$\pm 20 \times 10^{-6}$	+25 °C, DL = 0.1 μW
Turnover temperature	T_i	+25 °C ± 5 °C	
Parabolic coefficient	B	-0.04 × 10 ⁻⁶ / °C ² Max.	
Load capacitance	CL	7 pF, 9 pF, 12.5 pF	Please contact us other CL values
Motional resistance (ESR)	R1	90 kΩ Max.	
Motional capacitance	C1	6.0 fF Typ.	
Shunt capacitance	C0	1.2 pF Typ.	
Frequency aging	f_{age}	$\pm 3 \times 10^{-6}$ / year Max.	+25 °C, First year

Product name

Product name FC1610AN 32.768000kHz 12.5 +20.0-20.0
 (Standard form) ① ② ③ ④
 ①Model ②Frequency ③Load capacitance (pF) ④Frequency tolerance ($\times 10^{-6}$, +25 °C)

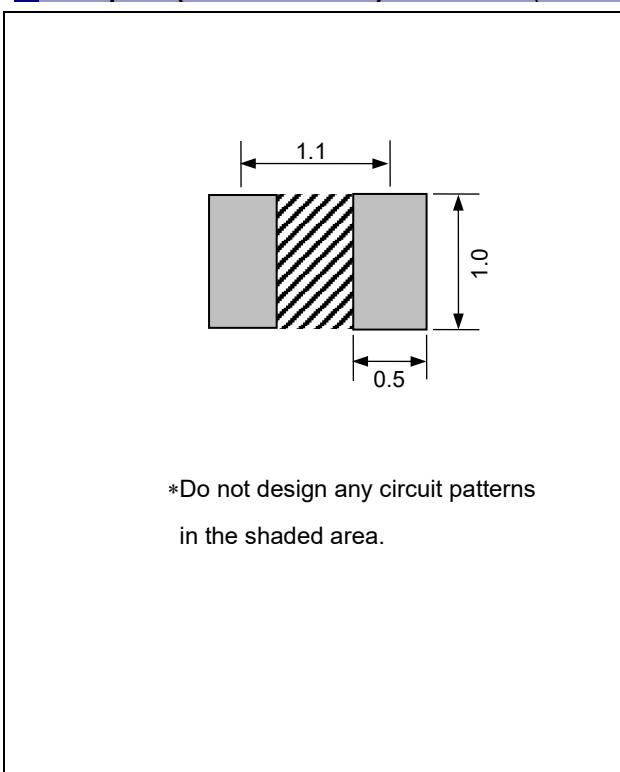
External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)



► **Explanation of the mark that are using it for the catalog**

	► Pb free.
	► Complies with EU RoHS directive. *About the products without the Pb-free mark. Contains Pb in products exempted by EU RoHS directive. (Contains Pb in sealing glass, high melting temperature type solder or other.)
	► Designed for automotive general equipment.
	► Designed for automotive applications related to driving and safety.

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