



kHz RANGE CRYSTAL UNIT

Product Number
MC-306 : Q1xMC3062xxxx00

MC-306 / MC-306 TYPE

- Frequency range : MC-306--- 32.768 kHz
: MC-306 TYPE--- 20 kHz to 120 kHz
- Thickness : 8.0 × 3.8 × 2.54 mm
- Overtone order : Fundamental
- Applications : Clock and Microcomputer



Specifications (characteristics)

| Item | Symbol | Specifications | | Conditions / Remarks |
|--------------------------------|------------------|---|--|--|
| | | MC-306 | MC-306 TYPE | |
| Nominal frequency range | f _{nom} | 32.768 kHz | 20 kHz to 120 kHz | Please contact us about available frequencies. |
| Storage temperature | T _{stg} | -55 C to +125 C | | Storage as single product. |
| Operating temperature | T _{use} | -40 C to +85 C | | |
| Level of drive | DL | 1.0 μW Max. | | |
| Frequency tolerance (standard) | f _{tol} | ±20 × 10 ⁻⁶ , ±50 × 10 ⁻⁶ | ±50 × 10 ⁻⁶ , ±100 × 10 ⁻⁶ | +25 C, DL=0.1 μW |
| Turnover temperature | T _i | +25 C ±5 C | | |
| Load capacitance | CL | 6 pF to ∞ (standard :12.5 pF) | | Please specify |
| Motional resistance (ESR) | R ₁ | 50 kΩ Max. | As per table below | |
| Frequency aging | f _{age} | ±3 × 10 ⁻⁹ / year Max. | ±5 × 10 ⁻⁹ / year Max. | +25 C, First year |

MC-306 TYPE Motional resistance (ESR)

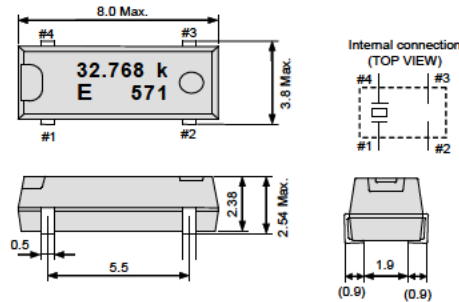
| Frequency | 20 kHz ≤ f _{nom} < 31.2 kHz | 31.2 kHz ≤ f _{nom} < 40 kHz | 40 kHz ≤ f _{nom} < 90 kHz | 90 kHz ≤ f _{nom} ≤ 120 kHz |
|---------------------|--------------------------------------|--------------------------------------|------------------------------------|-------------------------------------|
| Motional resistance | 55 kΩ Max. | 35 kΩ Max. | 20 kΩ Max. | 12 kΩ Max. |

Product name MC-306 32.768000kHz 12.5 +20.0-20.0
(Standard form) ① ② ③ ④

①Model ②Frequency ③Load capacitance(pF) ④Frequency tolerance(× 10⁻⁶, +25 C)

External dimensions

(Unit:mm)



Do not connect #2 and #3 to external device.
The metal case inside of the molding compound may be exposed on the top or bottom of this product.
This purely cosmetic and does not have any effect on quality, reliability or electrical specs.

Footprint (Recommended)

(Unit:mm)

