

MC-306 / MC-306 TYPE (kHz Range Crystal Unit SMD)

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



MC-306

Parametric Search

Inventory Search

RoHS

REACH

Brief Sheet

Design Support Data Download

3D CAD Data

Specifications

Item	Symbol	Specifications		Condition/Remarks
		MC-306	MC-306 TYPE	
Nominal frequency range	f_nom	32.768kHz	20kHz to 120kHz	Please contact us regarding available frequencies
Storage temperature	T_stg	-55°C to +125°C		Store as bare product.
Operating temperature	T_use	-40°C to +85°C		
Level of drive	DL	1.0μW Max.		
Frequency tolerance (standard)	f_tol	±20 × 10 ⁻⁶ , ±50 × 10 ⁻⁶	±50 × 10 ⁻⁶ , ±100 × 10 ⁻⁶	+25°C, DL=0.1μW
Turnover temperature	Ti	+25°C ±5°C		
Parabolic coefficient	B	-0.04 × 10 ⁻⁶ / °C ² Max.		
Load capacitance	CL	6pF to ∞ (standard :12.5pF)		Please specify
Motional resistance (ESR)	R1	50kΩ Max.	As per below table	
Motional capacitance	C1	1.8fF Typ.	4.0fF to 0.6fF	
Shunt capacitance	C0	0.9pF Typ.	2.0pF to 0.6pF	
Frequency aging	f_age	±3 × 10 ⁻⁶ / year Max.	±5 × 10 ⁻⁶ / year Max.	+25°C, First year

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 (x10⁻⁶ , @+25°C)

Product Number

MC-306 32.768 kHz

MC-306 20 kHz to 120 kHz

*Blank section is decided by each detail specifications.

Q 1 3 M C 3 0 6 2 □ □ □ □ 0 0

Q 1 4 M C 3 0 6 2 □ □ □ □ 0 0

① ② ③ ④ ⑤

①Crystal devices ②Model ③Pb free code (2 :EU RoHS / Terminal plating : Sn)

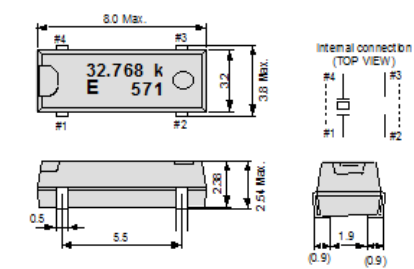
④Detail specifications ⑤Packig (00 : Recommended packing 3k pcs / reel)

MC-306 TYPE Motional resistance (ESR)

Frequency	20kHz≤f_nom <31.2kHz	31.2kHz≤f_nom <40kHz	40kHz≤f_nom <90kHz	90kHz≤f_nom <120kHz

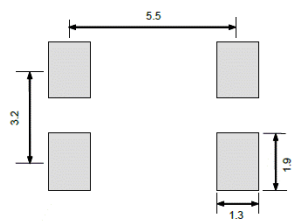
Motional resistance	55kΩ Max.	35kΩ Max.	20kΩ Max.	12kΩ Max.
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External dimensions



(Unit: mm)

Footprint (Recommended)



(Unit: mm)

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PRODUCTS

- ▶ RTC Module
- ▶ Crystal Oscillator
- ▶ Crystal Unit
- ▶ Automotive Solutions
- ▶ Sensor
- ▶ RF Transmitter Module

APPLICATIONS

- ▶ Common Block Diagram
- ▶ Individual Block Diagram

IC Partners

- ▶ Circuit design information
- ▶ IC Partners information

INFORMATION

- ▶ RTC Module Technical Tools
- ▶ Programmable XO Information
- ▶ Video Contents
- ▶ Support
- ▶ Technical Information
- ▶ Precaution
- ▶ Discontinued products
- ▶ Higher Quality / Green Purchasing / Business continuity management
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