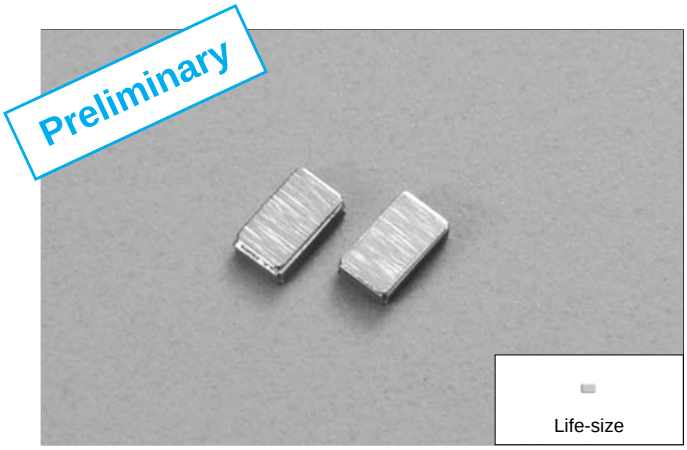
# Tuning fork Crystal Unit *(SMD - Ceramic Package)* MXC212

*Tape & Reel 3Kpcs*

Pb ROHS COMPLIANT

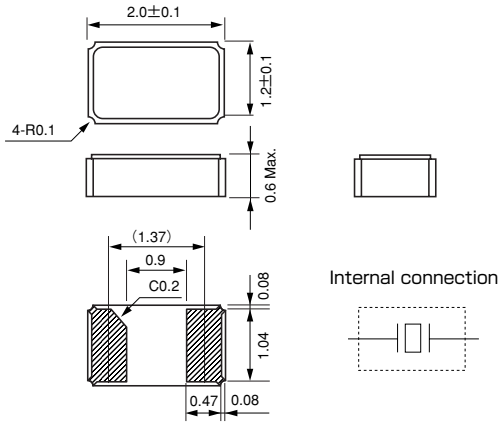




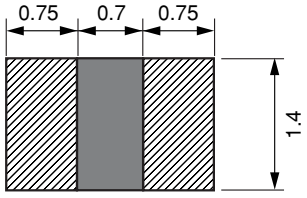

## ◆ Features

- Tuning fork crystal with ceramic packaged type.
- High-density SMD type
  Ultra-light weight with ultra-miniature packaging.
  High-stability assured with tight vacuum sealing.
- Most appropriate for portable devices and mobile telecommunications devices.
- Complete Pb free product.

## ◆ Dimensions (mm)




## ◆ Solder pad layout (mm)




∗ Do not design any patterns on shaded area.

## ◆ Standard Specifications

*Part Numbering system is in Page 14, click here*

| Item \ Model | | MXC212 | Conditions |
|---|---|---|---|
| **Nominal Frequency** | $f_0$ | 32.768KHz | |
| **Frequency Tolerance** | $\Delta f/f_0$ | ±30ppm | at 25° |
| **Load capacitance** | $C_L$ | 12.5 pF | Need to specify your requirement |
| **Operating Temperature Range** | $T_{OPR}$ | -40°C~+85°C | |
| **Storage Temperature Range** | $T_{STR}$ | -55°C~+125°C | |
| **Turnover Temperature** | $T_M$ | 25°C±5°C | |
| **Temperature Coefficient** | $\beta$ | -0.034±0.006ppm/°C$^2$ | |
| **Motional (series) resistance** | $R_1$ | 75K Ω Max. | at 25°C |
| **Level of drive** | $D_L$ | 0.5 μ W Max. | |
| **Aging (first year)** | $\Delta f/f_0$ | ±30ppm Max. | |

2009-02b **All specifications are subject to change without notice**



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# MDX codification 32,768 KHz Crystals (Part Numbering System)

Pb ROHS COMPLIANT

| Case | Frequency code | Tolerance at 25°C (ppm) | Load capacitance | Packing **Specification** |
|---|---|---|---|---|
| MFS206 | - 32 | D | F | T |

| Case | Frequency code | Tolerance at 25°C (ppm) | Load capacitance | Packing **Specification** |
|---|---|---|---|---|
| MFS206<br>MXC200T<br>MXC206J<br>MXC200S<br>MXC519<br>MXC415<br>MXC315<br>MXC212 | 32,768 KHz | D = +/– 20 ppm<br>F = +/– 15 ppm<br>E = +/– 10 ppm<br>H = +/– 5 ppm | A = Series<br>B = 6.0pF<br>C = 9.0pF (STD)<br>D = 9.5pF<br>E = 12.0pF<br>F = 12.5pF (STD)<br>G = 13.0pF<br>Q = 10.0pF<br>S = 11.0pF<br>V = 8.0pF<br>Y = 7.0pF<br>Z = Others | T = Tape & Reel<br>B = Bulk |

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