

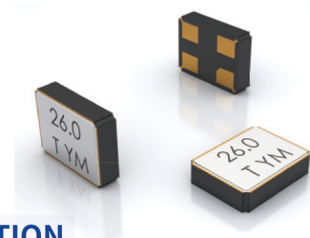
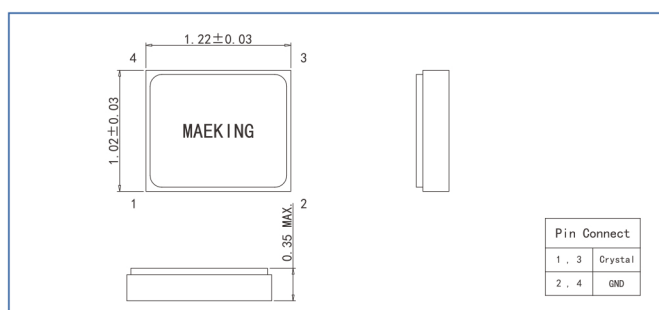
2.5 M1210

SMD AT cut crystal unit M1210 series

FEATURES

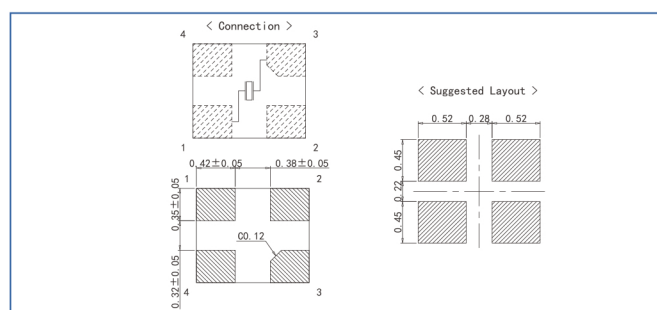
- Ultra-small size: $1.2 \times 1.0 \times 0.3$ mm
- Sealing with gold-tin preform ceramic package
- High stability and low aging
- Pb Free and RoHS compliant

DIMENSIONS



TYPICAL APPLICATION

- Small wireless device, Wireless module, IoT, Wearable device, TWS
- Health care equipment, Small consumer equipment etc



ELECTRICAL SPECIFICATION

Item/Type	M1210
Frequency Range	32 ~ 96MHz
Frequency Tolerance (at 25°C)	±10 ppm, or specify
Frequency Stability Over Operating Temperature Range	±10 ppm, or specify
Operating Temperature Range	-40 ~ +85°C
Shunt Capacitance (C_0)	3.0pF Max.
Drive Level	10μW (100μW Max.)
Load Capacitance	Series, 8pF, 10pF, or specify
Aging (at 25°C)	±3 ppm/year Max.
Storage Temperature Range	-40 ~ +125°C

EQUIVALENT SERIES RESISTANCE(ESR)

Frequency	Resistance
$32\text{MHz} \leq F_0 \leq 48\text{MHz}$	80Ω Max.
$48\text{MHz} \leq F_0 \leq 96\text{MHz}$	100Ω Max.

FREQ. STABILITY vs. TEMP. RANGE

ppm Temp.(°C)	±5	±10	±15	ppm Temp.(°C)	±15	±20	±30	±50
-10 ~ +60	△	○	○	-40 ~ +105	△	○	○	○
-20 ~ +70	×	△	○	-40 ~ +125	×	×	×	○
-40 ~ +85	×	×	△					

*○: Available △: Condition X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.