

■ Features

- 1.6 x 1.2 x 0.65 MAX. mm of surface mounted quartz crystal units with thermistor.
- Excellent reliability characteristics such as heat and mechanical shock.
- Pb-free and satisfy RoHs requirements.
- Reflow soldering is available.

■ Applications

Mobile Communications

■ Specifications

Frequency range	38.4 MHz
Overtone Order	Fundamental
Frequency tolerance at 25°C	±10 ppm
Operating temperature range and frequency stability	See Table 1
Equivalent series resistance	See Table 2
Shunt capacitance	3 pF Max or specify
Load capacitance	7, 8 pF
Drive level	10 ~ 100 μW
Insulation resistance (at DC 100V)	500 MΩ Min.
Thermistor Resistance	100 kΩ ± 1%
Thermistor B-constant	4250 kΩ ± 1%
Aging at 25°C	±0.7 ppm / year Max.
Storage temperature range	-40 ~ +105 °C
Measure instrument	S&A 250B system with PI circuit

■ Table 1: Operating temperature range and frequency stability

Temp	ppm				
	±5	±10	±12	±15	±20
- 30~+ 85 °C			●		

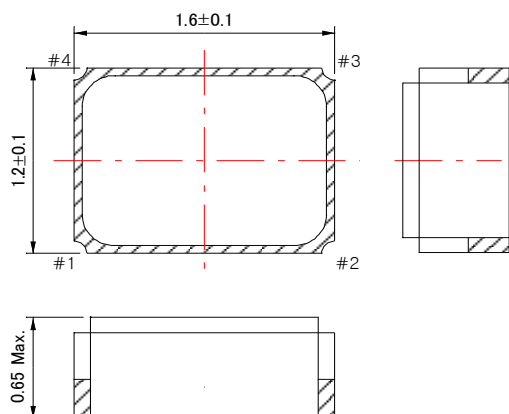
■ Table 2: Equivalent series resistance

Frequency (MHz)	Overtone Order	ESR (Ω MAX)
38.4	Fundamental	50

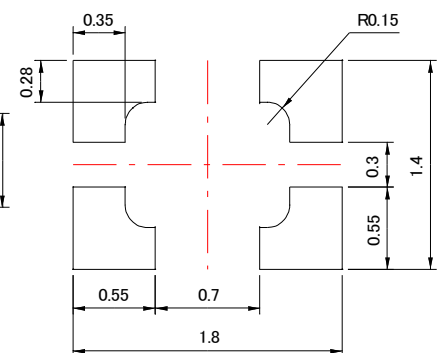
* The mark “●” denotes our achieved level

* Inflection Point (T0): 29°C, 30°C (38.4MHz)

■ Dimensions (unit: mm)



■ Land pattern (unit: mm)



Pin	Function
#1	Xtal Terminal (Input)
#2	Thermistor Terminal + GND
#3	Xtal Terminal (Output)
#4	Thermistor Terminal