

2Z Series

■ Features

- 2.5 x 2.0 x 1.0 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	19.2 MHz	26 MHz
Overtone Order	Fundamental	Fundamental
Frequency tolerance at 25°C	±10 ppm	±10 ppm
Operating temperature range and frequency stability	See Table 1	See Table 1
Equivalent series resistance	See Table 2	See Table 2
Shunt capacitance	1.8 ~ 3.1 pF	3 pF Max or specify
Load capacitance	7 pF	7, 9 pF
Drive level	10 ~ 100 μW	100, 150 μW MAX.
Insulation resistance (at DC 100V)	500 MΩ Min.	500 MΩ Min.
Thermistor Resistance	100 kΩ ± 1%	100 kΩ ± 1%
Thermistor B-constant	4250 kΩ ± 1%	4250 kΩ ± 1%
Aging at 25°C	±0.7 ppm / year Max.	±0.7 ppm / year Max.
Storage temperature range	-40 ~ +105 °C	-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		●	●		

* The mark “●” denotes our achieved level

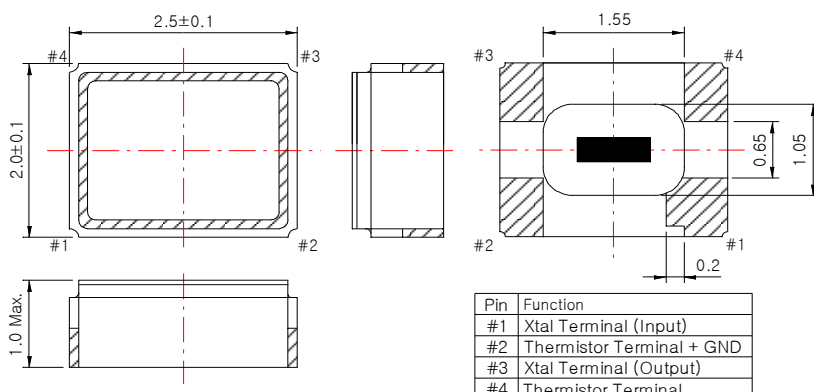
* Inflection Point (T0): 25°C, 28.5°C, 30.5°C (26 MHz), 30°C (19.2 MHz)

■ Table 2

Equivalent series resistance

Frequency (MHz)	Overtone Order	ESR (Ω MAX)
19.2	Fundamental	70
26	Fundamental	30, 50

■ Dimensions (unit: mm)



■ Land pattern (unit: mm)

