



### ■ SMD X-TAL 2.5×2.0mm

- Ultra miniature and lightweight SMD crystal resonator.
- High precision and high reliability.
- Nominal frequency range : 15.000MHz to 48.000MHz.
- Operation mode : Fundamental.

- Applications : Mobile phone, Bluetooth, W-LAN, ISM band radio, Clock for MPU.

## ■ Standard Specification »»

Frequency range	15.000MHz to 48.000MHz
Operation mode	Fundamental
Motional resistance (ESR)	As per below table
Load capacitance (CL)	Standard (9pF, 10pF, 12pF), user spec
Level of drive (DL)	10μW(std), 500μW Max
Frequency tolerance (25°C)	± 30ppm Max, user spec
Temperature stability	± 50ppm Max, user spec
Operating temperature range	-10°C to +70°C(std), -40°C to +85°C
Storage temperature range	-45°C to +100°C
Aging (Initial first year)	± 3ppm Max

### ■ Motional resistance (ESR)

Frequency (MHz)	15.000 ≤ f < 25.000	25.001 ≤ f < 35.000	35.001 ≤ f < 48.000
Cl (Ω)	80	50	40
Operation mode	Fundamental		

## ■ Dimensions (mm) »»

