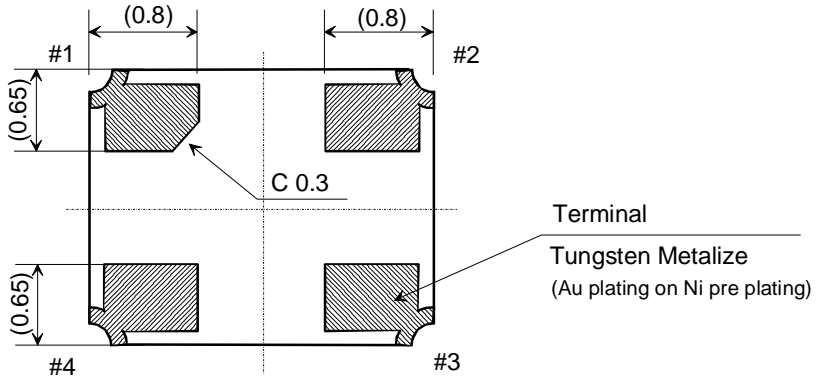
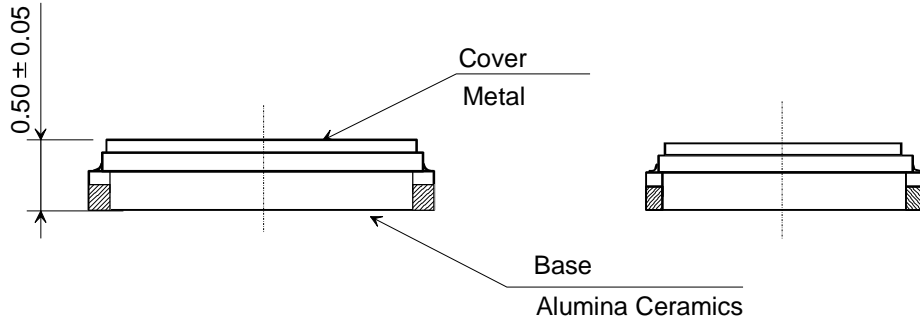
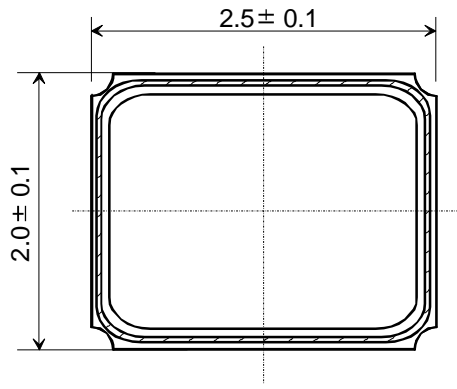
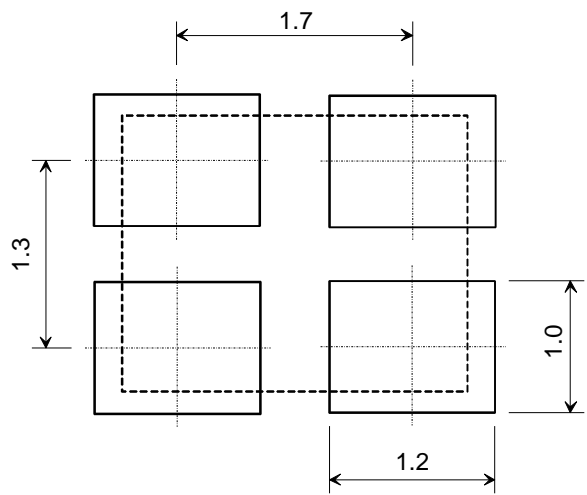


SPECIFICATION

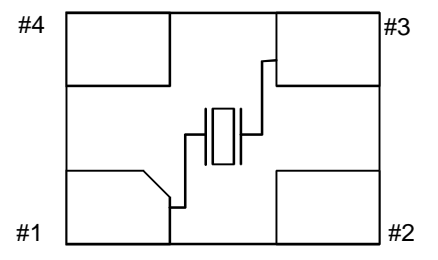
1. Customer specifications number :
2. NDK specification number :
3. Type : NX2520SA
4. Electrical characteristics
 - 4.1 Nominal frequency : 19.200 MHz
 - 4.2 Overtone order : Fundamental
 - 4.3 Adjustment tolerance : $\pm 20 \times 10^{-6}$ max. (+25 °C)
 - 4.4 Tolerance over the temperature range : $\pm 30 \times 10^{-6}$ max. (-30 to +85 °C)
The reference temperature shall be +25 °C.
 - 4.5 Equivalent resistance (R_1) : 60Ω max.
 - 4.6 Insulation resistance : Terminal to terminal insulation resistance also terminal to cover insulation resistance must be 500MΩ (min) when DC100V ± 15 V is applied.
 - 4.7 Maximum drive level : 200 μW
5. Measurement circuit
 - 5.1 Frequency measurement
 - Measuring instrument : IECπ circuit
 - Load capacitance(C_L) : 13pF
 - Level of drive : 10μW
 - 5.2 Equivalent resistance measurement
 - Measuring instrument : IECπ circuit
 - Load capacitance(C_L) : Series
 - Level of drive : 10μW
6. Other performances
 - 6.1 Operating Temperature range : -30 to +85°C
 - 6.2 Storage temperature range : -40 to +85°C
 - 6.3 Air-tightness : Less than 1.1×10^{-9} Pa m³/s (Helium leak detector)
 - 6.4 Aging : ± 5 ppm max./ 1 year (at +25 °C)



LAND PATTERN (TYPICAL)



[TOP VIEW] PIN CONNECTION



TERMINAL
 #1,#3:X'tal
 #2,#4:GND(CONNECTION COVER)