

X4 Type

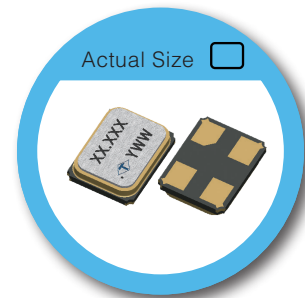
1.20 x 1.00 mm SMD Crystal

FEATURE

- Typical 1.20 x 1.00 x 0.3 mm ultra thin ceramic package.
- 8 mm width Tape & Reel package for automatic assembly.
- Tight tolerance 10 ppm available.

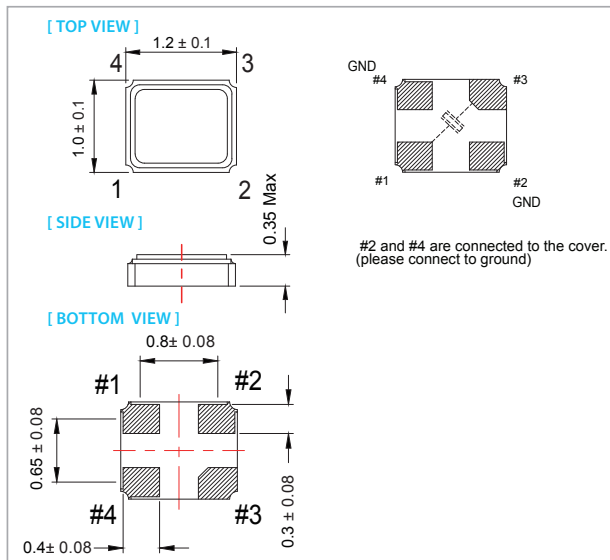
TYPICAL APPLICATION

- Bluetooth, Mobile phone, Wireless LAN.
- Office Automation.
- Audio & Video.

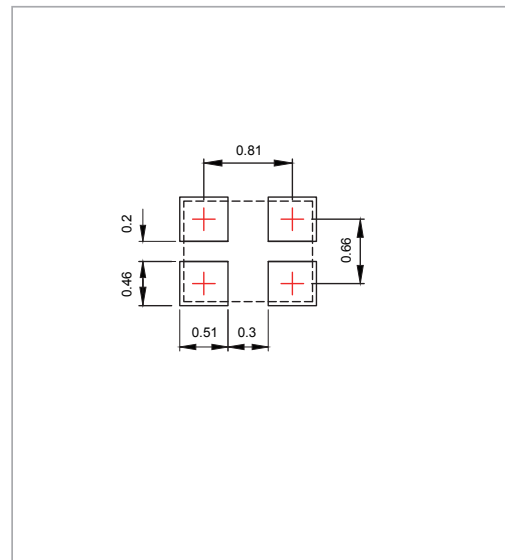


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-40	-	125	°C
Standard Frequency	32,40,48,76.8			MHz
Level of Drive	-	10	200	μ W
Shunt Capacitance (C0)	-	-	3.0	pF
Insulation Resistance	500MΩ @ DC100V	-	-	
Aging	±3.0			ppm/year

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

EQUIVALENT SERIES RESISTANCE (E. S. R.)

Frequency Range	MODE	E.S.R.
24 MHz ≤ Fo < 40 MHz	A1	<150 Ω
40 MHz ≤ Fo < 60 MHz	A1	<100 Ω
60 MHz ≤ Fo ≤ 80 MHz	A1	<80 Ω

FREQ. STABILITY vs. TEMP. RANGE

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

* O: Available △:Conditional X: Not available

FREQ. STABILITY vs. WIDE TEMP. RANGE

Temp.(°C)	ppm	±30	±50
-40 ~ +105		△	○
-40 ~ +125		×	△

* O: Available △:Conditional X: Not available

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

Specifications subject to change without notice.