

XI/XJ Type Crystal

RoHS Compliant Optional

FEATURE

XI

1. XI Typical 11.1 x 4.68 x 3.51 mm standard footprint.
2. Low profile for close PCB stacking.
3. Packing: Plastic bag 200/500 pcs or Ammopack 1000 pcs (800 pcs).

XJ

1. XJ Typical 13.0 x 4.85 x 4.2 mm metal can SMD package.
2. 24mm width Tape & Reel package for automatic assembly.
3. Packing: Tape & Reel, standard 1000 pcs per Reel.

ORDERING INFORMATION

Select option

X'tal	Package	Load Capacitance (pF)	Freq. Tol. @ 25°C (ppm)	Freq. Stability (ppm)	Temp. Range (°C)	Special Requirement	Oscillator Mode	Appearance	Lead Free	Dash	Freq. (MHz)
	I : U4 J : U4B	A : 8 B : 9 C : 10 D : 12 F : 16 G : 18 H : 20 I : 30 J : 32 S : Series	B : ± 10 P : ± 15 C : ± 20 E : ± 30 G : ± 50 H : ± 100	A : ± 5 B : ± 10 P : ± 15 C : ± 20 E : ± 30 G : ± 50 H : ± 100	I : -10~+60 C : -20~+70 L : -40~+85	B : Spurious D : DLD H : High C1 L : Low C1 N : No Special P : Pullability Q : Q Value S : Several	A : AT Fundamental T : AT 3 rd Overtone	I : Insulator N : Normal S : Lead Cut (by Customer Request) H : Insulator & Lead Cut	F : RoHS Compliant L : Not RoHS Compliant		XX.XXXXXX

X

I

Example : XIHCCCNANF-25.000000

X'TAL I-TYPE; CL: 20pF; Freq. Tolerance: ±20ppm; Frequency Stability: ±20ppm; Temp Range:-20°C to +70°C; No Special Requirement; AT Fundamental; Normal Appearance; RoHS Compliant; Freq. 25.000000MHz.

* Not all combinations of options are available.

EQUIVALENT SERIES RESISTANCE(ESR)

TYPE FREQUENCY	MODE	E.S.R
Freq. ≤ 4MHz	A1	140Ω
4MHz < Freq. < 5MHz	A1	120Ω
5MHz ≤ Freq. < 6MHz	A1	80Ω
6MHz ≤ Freq. < 7MHz	A1	70Ω
7MHz ≤ Freq. < 9MHz	A1	45Ω
9MHz ≤ Freq. < 13MHz	A1	40Ω
13MHz ≤ Freq. < 16MHz	A1	35Ω
16MHz ≤ Freq. < 20MHz	A1	30Ω
20MHz ≤ Freq. ≤ 27MHz	A1	25Ω
27MHz < Freq. < 32MHz	A3	120Ω
32MHz ≤ Freq. ≤ 80MHz	A3	80Ω

A1:AT cut fundamental

A3:AT Third Overtone

ELECTRICAL SPECIFICATION

Storage Temp. Range	-55°C~125°C
Drive Level	10 μW typical
Shunt Capacitance (Co)	7.0 pF Max.
Insulation Resistance	500MΩ Min. @ DC 100V
Aging	First year ±5ppm Sub-year ±5ppm

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


FREQ. STABILITY vs. LOAD CAPACITANCE

Load Capacitance	ppm	A: ± 5	B: ± 10	P: ± 15	C: ± 20	E: ± 30
A	8pF	×	×	△	○	○
C	10pF	×	×	△	○	○
D	12pF	×	△	○	○	○
F	16pF	×	△	○	○	○
S	Series	△	○	○	○	○

○:Standard △:Available (case by case) ×:Not available

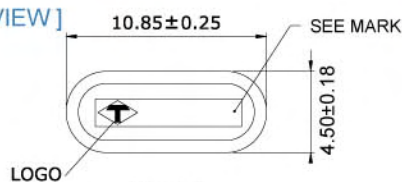
FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	A: ± 5	B: ± 10	P: ± 15	C: ± 20
I	-10~+60	×	○	○	○
C	-20~+70	×	△	○	○
L	-40~+85	×	×	×	○

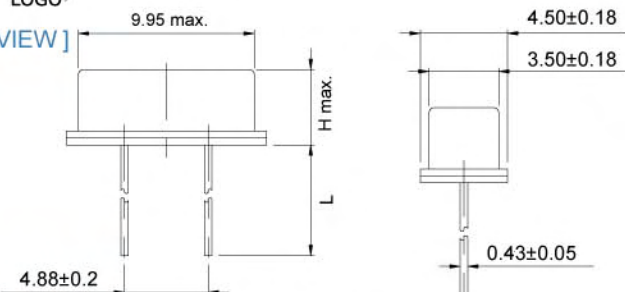
○:Standard △:Available (case by case) ×:Not available

OUTLINE DRAWING
XI

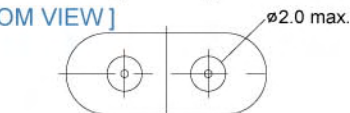
[TOP VIEW]



[SIDE VIEW]



[BOTTOM VIEW]



UNIT : mm

MODEL	H(mm)
XI	3.51

MARK

1 MARK 1 :

XX.X MY
 XX.X = FREQUENCY
 UNIT:MHz
 M:MONTH
 A→ JAN G→ JUL
 B→ FEB H→ AUG
 C→ MAR I→ SEP
 D→ APR J→ OCT
 E→ MAY K→ NOV
 F→ JUN L→ DEC
 Y : YEAR 200X

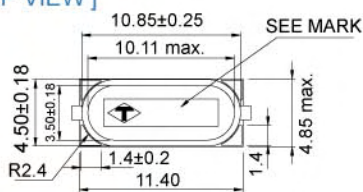
2 MARK 2

XX.XXX
 UNIT:MHz

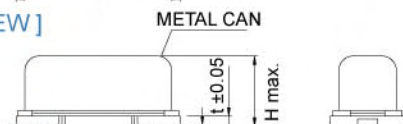
3 MARK BY CUSTOMER

XJ

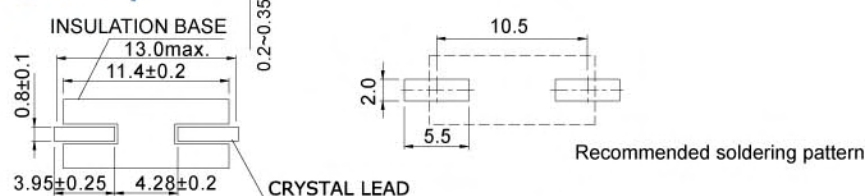
[TOP VIEW]



[SIDE VIEW]



[BOTTOM VIEW]



UNIT : mm

MODEL	H(mm)
XJ	4.20