Actual Size

XV Type Crystal

RoHS Compliant Standard

FEATURE

1.Typical 5.0 × 3.2 × 0.9 mm ultra thin ceramic package.
2.12 mm width Tape & Reel package for automatic assembly.
3.Tight tolerance 10 ppm available.
4.Packing : Tape & Reel, 1000/2000/3000/5000 pcs per Reel.

ORDERING INFORMATION

Select option

X'tal	Package	Load Capacitance (pF)	Freq. Tol. @ 25ºC (ppm)	Freq. Stability (ppm)	Temp. Range (ºC)	Special Requirement	Oscillator Mode	Appearance	Lead Free	Dash	Freq. (MHz)
	5×3.2	A : 8 B : 9 C : 10 D : 12 F : 16 G : 18 H : 20 J : 32 S :Series	B :± 10 P :± 15 C :± 20 D :± 25 E :± 30 G :± 50 H :±100	A :± 5 B :± 10 P :± 15 C :± 20 D :± 25 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 M :Mask	A : AT Fundamental	N:Normal	F:RoHS Compliant		XX.XXXXXX

X V □ □ □ □ □ □ □ □ — □

Example : XVBBBINANF-13.000000
X'TAL V-TYPE; CL: 9pF; Frequency Tolerance: ±10ppm; Frequency Stability: ±10ppm; Temp. Range: -10ºC to +60ºC. ; No Special Requirement; AT Fundamental; Normal Appearance; RoHS Compliant; Freq. 13.000000MHz.
* Not all combinations of options are available.

ELECTRICAL SPECIFICATION

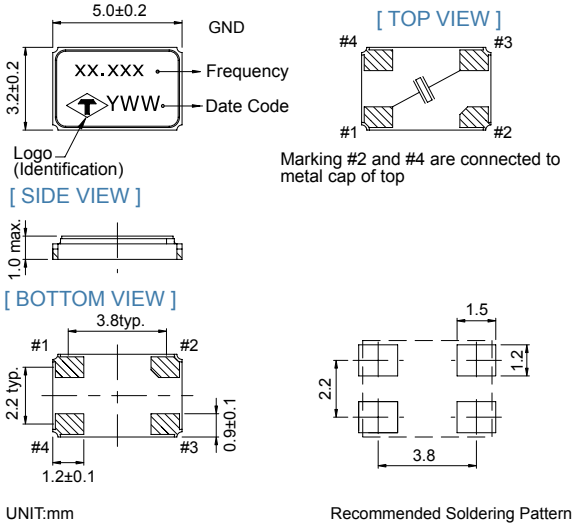
Storage Temp. Range	-55°C~125°C
Drive Level	10 μW typical, 100 μW Max.
Shunt Capacitance (Co)	7.0 pF Max.
Insulation Resistance	500MΩMin. @ DC 100V
Aging	±1.0ppm/year

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

EQUIVALENT SERIES RESISTANCE(ESR)

TYPE FREQUENCY	MODE	E.S.R
11MHz ≦ Freq < 12MHz	A1	65Ω
12MHz ≦ Freq < 13MHz	A1	60Ω
13MHz ≦ Freq < 16MHz	A1	55Ω
16MHz ≦ Freq < 24MHz	A1	50Ω
24MHz ≦ Freq < 48MHz	A1	45Ω
48MHz ≦ Freq < 53.125MHz	A1	40Ω
Freq = 80MHz	A3	60Ω

OUTLINE DRAWING



FREQ. STABILITY vs. TEMP. RANGE

Temp.(ºC) \ 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

MARK
1 XX.XXX = FREQUENCY (MHz) YWW Y = LAST DIGIT OF YEAR WW = WEEK NO.
2 MARK BY CUSTOMER Max. LINE 2 LINES Max. CODE OF LINE 6 CODES