

# XW Type Crystal

RoHS Compliant Standard



Actual Size

## FEATURE

1. Typical 4.0 x 2.5 x 0.8 mm ultra thin ceramic package.
2. For Bluetooth and mobile phone.
3. Packing : Tape & Reel, 1000/2000/3000/5000 pcs per Reel, 1~99 pcs per Bulk/Tape.

## ORDERING INFORMATION

X	W	B	B	B	I	N	A	N	F	-	?
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)
	4 x 2.5	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 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	A:AT Fundamental	N:Normal	F:RoHS Compliant		xx.xxxxxx

### Ordering Example: XWBBBINANF-13.000000MHz

X'TAL W-TYPE; CL: 9pF; Freq. Tolerance: ±10ppm; Freq. Stability: ±10ppm; Temp. Range: -10°C to +60°C ; No Special Requirement; AT Fundamental; Normal Appearance; RoHS Compliant; Freq. 13.000000MHz.

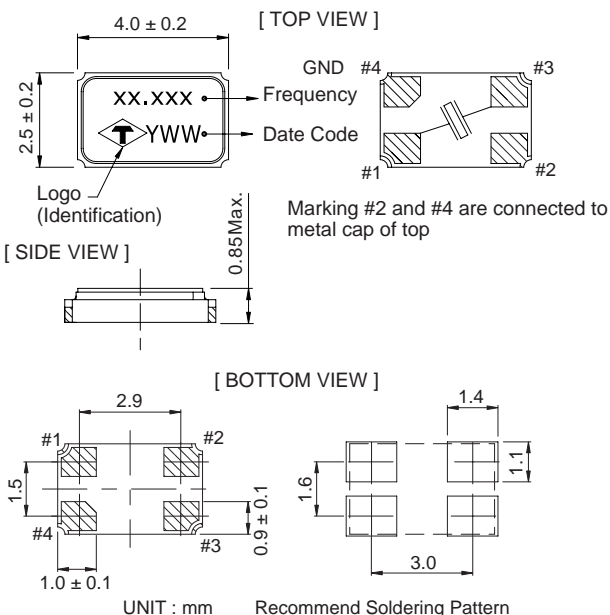
## ELECTRICAL SPECIFICATION

Storage Temp. Range	-55°C~125 °C
Drive Level	10 μW typical, 100 μW Max.
Shunt Capacitance (Co)	3.0 pF Max.
Insulation Resistance	500MΩMin. @ DC 100V
Aging	± 1.0ppm/year

## EQUIVALENT SERIES RESISTANCE(ESR)

TYPE REFEQUENCY	MODE	E.S.R
10MHz ≤ Freq < 16MHz	A1	≤80 Ω
Freq > 16MHz	A1	≤50 Ω

## OUTLINE DRAWING



## FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	A:±5	B:±10	P:±15	C:±20	D:±25
I	-10~+60	△	○	○	○	○
C	-20~+70	X	○	○	○	○
L	-40~+85	X	X	○	○	○

○ : Standard    △ : Available (case by case)    X : 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