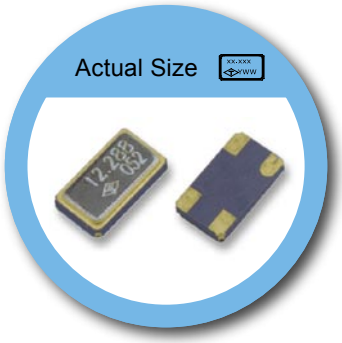


XR Type Crystal

RoHS Compliant Standard

FEATURE

1.Typical 6.0 × 3.5 × 1.0 mm ceramic SMD package.
2.16 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)
	6×3.5	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	A :± 5 B :± 10 P :± 15 C :± 20 D :± 25 E :± 30	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

X R □ □ □ □ □ □ □ □ — □

Example : XRHBBINANF-13.000000
X'TAL R-TYPE; CL: 20pF; Freq. Tolerance: ±10ppm; Freq. 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

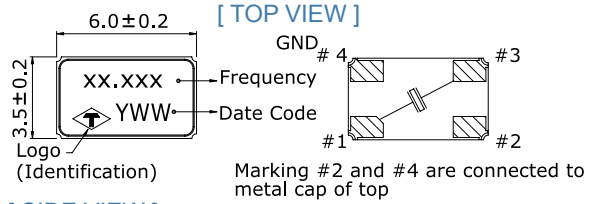
Storage Temp. Range	-55°C~125°C
Drive Level	10 μW typical, 100 μW Max.
Shunt Capacitance (Co)	7.0 pF Max.
Insulation Resistance	500MΩMin. @ DC 100V
Aging	±1.0ppm/year

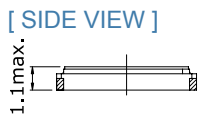
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

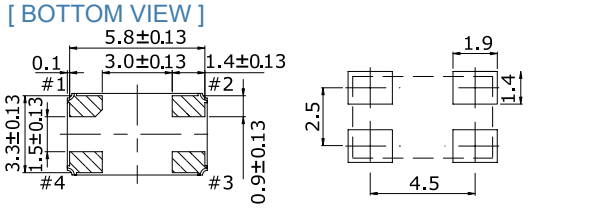
EQUIVALENT SERIES RESISTANCE(ESR)

TYPE FREQUENCY	MODE	E.S.R
8MHz ≦ Freq < 12MHz	A1	< 60Ω
12MHz ≦ Freq < 13MHz	A1	< 50Ω
13MHz ≦ Freq < 19MHz	A1	< 45Ω
19MHz ≦ Freq < 20MHz	A1	< 40Ω
20MHz ≦ Freq < 30MHz	A1	< 35Ω
30MHz ≦ Freq	A1	< 30Ω

OUTLINE DRAWING







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

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

Specifications subject to change without notice.