

# LOW FREQUENCY CYLINDRICAL WATCH CRYSTAL



AB206

\* RoHS COMPLIANT

6.2 x 2.1mm

## FEATURES:

- Miniature high frequency crystals
- Excellent frequency vs. temperature stability
- Industrial temperature range available

## APPLICATIONS:

- Communications equipment
- Measuring instruments
- Audio and video equipment
- Hand held devices
- Portable electronics
- Microprocessor clocks

## STANDARD SPECIFICATIONS:

PARAMETERS	
Nominal Frequency	6.000MHz - 27.000MHz
Operating Temperature	-10°C to + 60°C
Storage Temperature	-40°C to +85°C
Frequency Tolerance	± 30 ppm max. at +25°C (see option)
Frequency Stability	± 30 ppm max. (see option)
Equivalent Series Resistance	See Table 1
Load Capacitance CL	16pF (see option)
Shunt Capacitance	7pF
Drive Level	500µW max., 100µW correlation
Aging at 25°C/year	± 5ppm max.
Insulation Resistance	500 MΩ min. at 100 Vdc ± 15V

## OPTIONS AND PART IDENTIFICATION (Left blank if standard):

AB206 - Frequency - CL - ESR - Tolerance - Stability - Packaging

### CL options:

Load cap. in pF (minimum 10 pF)  
S for Series Resonance

### ESR options:

RXXX (value in ohms max.)

### Freq Stability options:

U for ± 10 ppm max.  
G for ± 15 ppm max.  
X for ± 20 ppm max.  
W for ± 25 ppm max.  
H for ± 35 ppm max.  
Z for ± 50 ppm max.

### Freq Tolerance options:

1 for ± 10 ppm max.  
7 for ± 15 ppm max.  
2 for ± 20 ppm max.  
3 for ± 25 ppm max.  
5 for ± 50 ppm max.

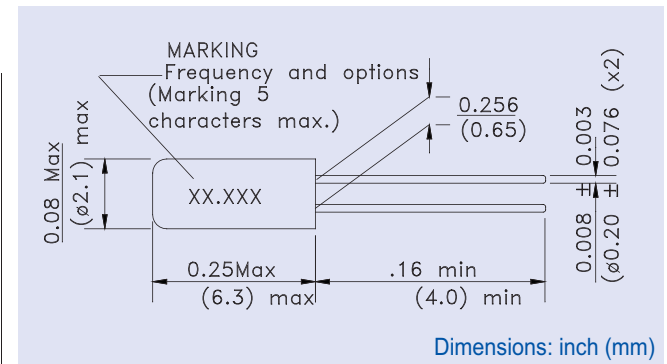
### Packaging option:

T for Tape and Reel

## ENVIRONMENTAL SPECIFICATIONS:

- Drop test: ±5ppm max. with natural drop on a hard wood board at 75cm, 3 times or shock test of 3,000g x 0.3ms. X 1/2 sine wave, 3 directions.
- Marking: Dip units in solvents, 10 strokes with brush, 3 times.
- Sealing: 1x10E-2 µPa.m3/s max.
- Soldering: Lead wires should be soldered within 105 with the iron heated to a temperature no higher than 270°C.

## OUTLINE DRAWING:



## TABLE 1:

Frequency Range (MHz)	Max ESR (Ω)
6.000 to 6.999 (Fund)	90
7.000 to 8.999 (Fund)	60
9.000 to 12.999 (Fund)	60
13.000 to 15.999 (Fund)	50
16.000 to 19.999 (Fund)	40
20.000 to 29.999 (Fund)	30
30.000 to 70.000 (3 <sup>rd</sup> O/T)	100