

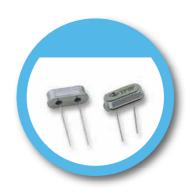
# XI Type 10.8 x 4.5 mm Crystal

#### **FEATURE**

- Typical 10.8 x 4.5 x 3.4 mm standard footprint.
- Low profile for close PCB stacking.

#### TYPICAL APPLICATION

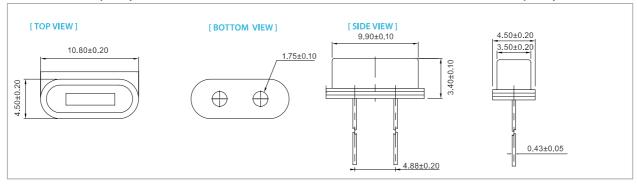
- Automotive
- Bluetooth, Wireless
- Computers, Modems, Communications
- Set-top Box, DECT/WDCT



**RoHS Compliant** 

## **DIMENSION (mm)**

#### **SOLDER PAD LAYOUT (mm)**



#### **ELECTRICAL SPECIFICATION**

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-55	-	125	°C
Level of Drive	-	10	800	μw
Shunt Capacitance (Co)	-	-	7.0	pF
Insulation Resistance	500 MΩ@ DC100V	-	-	
Aging	±5			ppm / year

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

## **EQUIVALENT SERIES RESISTANCE (E.S.R)**

Frequency Range	MODE	E.S.R
Fo ≦ 3.58 MHz	A1	<140 Ω
4 MHz < Fo < 5 MHz	A1	<120 Ω
5 MHz ≦ Fo < 7 MHz	A1	<80Ω
7 MHz ≦ Fo < 9 MHz	A1	<45 Ω
9 MHz ≦ Fo < 13 MHz	A1	<40 Ω
13 MHz ≦ Fo < 16 MHz	A1	<35 Ω
16 MHz ≦ Fo < 20 MHz	A1	<30 Ω
20 MHz ≦ Fo < 30 MHz	A1	<25 Ω
30 MHz ≦ Fo < 36 MHz	A1	<25 Ω
30 MHz ≦ Fo < 36 MHz	А3	<80Ω
36 MHz ≦ Fo ≦ 80 MHz	A3	<80 Ω

### FREQ. STABILITY vs. LOAD CAPACITANCE

Load Capacitance ppm	±5	±10	±15	±20	±30
8pF	×	×		0	0
10pF	×	×		0	
12pF	×	$\triangle$	0	0	0
12pF 16pF	×	$\triangle$	0	0	
Series	Δ	0	0	Ó	Ó

<sup>\* ○:</sup> Available △:Conditional X: Not available

## FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	±5	±10	±15	±20
-10 ~ +60	×	0	0	0
-20 ~ +70	×	Δ	0	0
<b>-</b> 40 ~ +85	×	×	×	0

<sup>\*</sup>  $\bigcirc$ : Available  $\triangle$ :Conditional X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.

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