

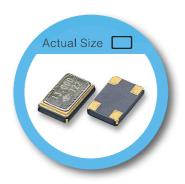
# XV Type 5.0 x 3.2 mm SMD Crystal

#### **FEATURE**

- Typical  $5.0 \times 3.2 \times 0.8$  mm ceramic SMD package.
- 12 mm width Tape & Reel package for automatic assembly.
- Tight tolerance 10 ppm available.

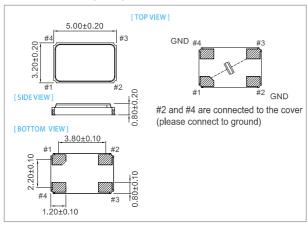
## **TYPICAL APPLICATION**

- Bluetooth, GPS
- Display, TV(FPD/FTF LCD)
- Computer Peripherals

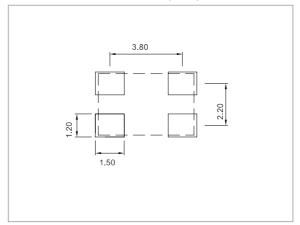


**RoHS Compliant** 

# **DIMENSION (mm)**



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



#### **ELECTRICAL SPECIFICATION**

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-55 -		125	°C
Standard Frequency	12, 16, 20, 25, 27, 28, 40			MHz
Level of Drive	-	10	300	μw
Shunt Capacitance (Co)	-	-	5.0	pF
Insulation Resistance	500 MΩ@ DC100V	-	-	
Aging	±3.0			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
8 MHz ≦ Fo < 11 MHz	A1	<100Ω
11 MHz ≦ Fo < 12 MHz	A1	<65Ω
12 MHz ≦ Fo < 13 MHz	A1	<60Ω
13 MHz ≦ Fo < 16 MHz	A1	<55Ω
16 MHz ≦ Fo < 24 MHz	A1	<50Ω
24 MHz ≦ Fo < 48 MHz	A1	<45Ω
48 MHz ≦ Fo < 53.125 MHz	A1	<40Ω
Fo = 80 MHz	A3	<60Ω

## FREQ. STABILITY vs. TEMP. RANGE

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

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

# FREQ. STABILITY vs. WIDE TEMP. RANGE

ppm Temp.(°C)	±15	±20	±30	±50
<del>-</del> 40 ~ +105	$\triangle$	0	0	0
<del>-</del> 40 ~ +125	X	×	$\triangle$	0

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