

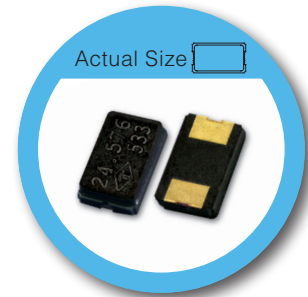
# 8.0 x 4.5 mm Glass Seal SMD Crystal – XQ Type

## FEATURE

- Typical 8.0 x 4.5 x 1.45 mm full ceramic SMD package.
- 16 mm width Tape & Reel package for automatic assembly.
- Packing: Tape & Reel, 1000/3000pcs per Reel.

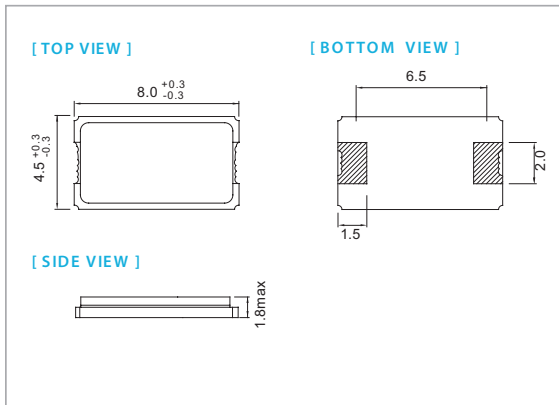
## TYPICAL APPLICATION

- Automotive
- Notebook, Computer Peripherals, Hard Disk
- Office Automation
- Audio & Video

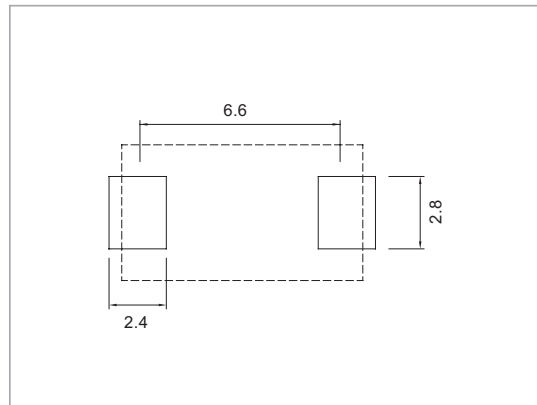


**RoHS Compliant Standard**

## DIMENSION (mm)



## SOLDER PAD LAYOUT (mm)



## ELECTRICAL SPECIFICATION

Parameter	Min.	Typical	Max.	Unit
Storage Temp. Range	-55	-	125	°C
Level of Drive	-	10	500	µw
Shunt Capacitance (Co)	-	-	7.0	pF
Insulation Resistance	500 MΩ @ DC100V	-	-	
Aging		±5.0		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)

TYPE FREQUENCY	MODE	E.S.R
7.3728 MHz ≤ Freq. < 11 MHz	A1	< 110Ω
11 MHz ≤ Freq. < 14.1 MHz	A1	< 50Ω
14.1 MHz ≤ Freq. < 18 MHz	A1	< 45Ω
18 MHz ≤ Freq. < 20 MHz	A1	< 30Ω
20 MHz ≤ Freq. < 32 MHz	A1	< 25Ω
32 MHz ≤ Freq. < 48 MHz	A3	< 110Ω
48 MHz ≤ Freq. < 70 MHz	A3	< 100Ω

## FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm			
	±5	±10	±15	±30
-10 ~ +60	△	○	○	○
-20 ~ +70	×	△	○	○
-40 ~ +85	×	△	△	○

\* ○: Available △: Conditional X: Not available