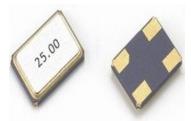
# QUARTZ CRYSTAL

# SMD Seam Sealed Crystal - C3225 Series (3.2x2.5x0.7mm)

#### Features

- \* High precision characteristic covering up to high frequency range
- \* Designed for automatic mounting and reflow soldering
- \* The best choice of Bluetooth wireless communication sets
- \* Excellent heat resistance and environmental characteristics
- \* RoHS Compliant / Pb Free



Specifications	
Holder Type	C3225 Series
Frequency	8 Mhz ~ 104 Mhz
Operating Temperature Range	-20°C to +70°C typical or custom-designed
Storage Temperature Range	- 55 to +125° typical
Load Capacitance	8pF ~ 32pF of Series
Frequency Tolerance at 25°C	±10ppm ~ ±30ppm, or specify
Frequency Stability	±10 ~ 50ppm, or specify
Shunt Capacitance	3.0pF Max.
Insulation Resistance	500MΩ Min. at DC 100V
Drive Level	1 ~ 100μW (50μW typical)
Aging (at $25^{\circ}$ C)	±3ppm/ year Max.

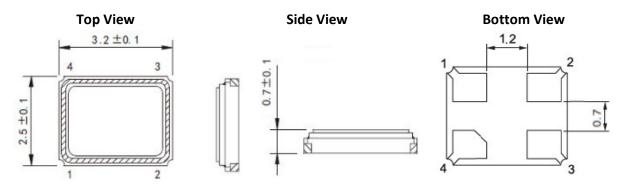
### **Equivalent Series Resistance (ESR) and Mode of Operation**

Frequency Range	ESR(Ω)	Mode
8 ~ 10 Mhz	200 Max.	AT/Fundamental
10 ~ 24 Mhz	80 Max.	AT/Fundamental
24 ~ 104 Mhz	60 Max.	AT/Fundamental

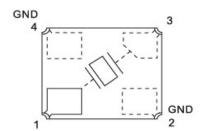
How to order					
C3225	20M	2	20	<u>D</u>	R
Series	Frequency	Operating Temp.	Load capacitance	Frequency Tol.	Package
size: 3.2x2.5x0.7mm	20= 20Mhz 25= 25Mhz 30= 30Mhz 40= 40Mhz	1= -10°C ~+60°C 2= -20°C ~+70°C 3= -40°C ~+85°C 4= -40°C ~+105°C 5= -30°C ~+85°C	10 = 10pF 15 = 15pF 20 = 20pF 30 = 30pF Or specify	B=±10ppm C=±15ppm D=±20ppm E=±30ppm F=±50ppm	R = Tape Reel



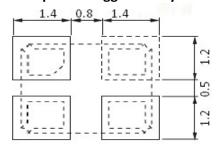
# **Dimensions (mm)**



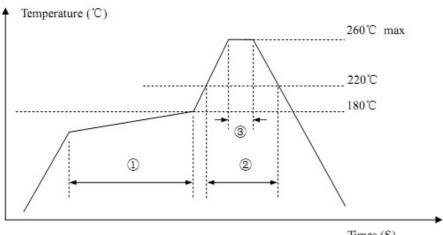
#### **Top View Crystal Connection**



#### **Top View Suggested Layout**



### **Reflow Condition**



Times (S)

	1	Preheat	160~180℃	120sec. max
Pb free reflow	2	Primary heat	220℃	60sec. max
	3	Peak	260℃	10sec. max.



## **Dimension of Reel**

