

# SX-3225

CRYSTAL

SMD



**TYPICAL APPLICATIONS**

Bluetooth, MP3, PDA, Cellular, Wireless LAN, Audio Equipment, Disc Drivers, PCMCIA, PCs, Hand-held Electronic Products

**FEATURES**

Ultra-thin, Ceramic SMD Package, Vacuum Seam Sealed, Lead-free Design, Tight Tolerance and Stability, Reflow Soldering, Emboss Taping, RoHS Compliant Standard

**DIMENSIONS**

3.2x2.5x0.6[mm]



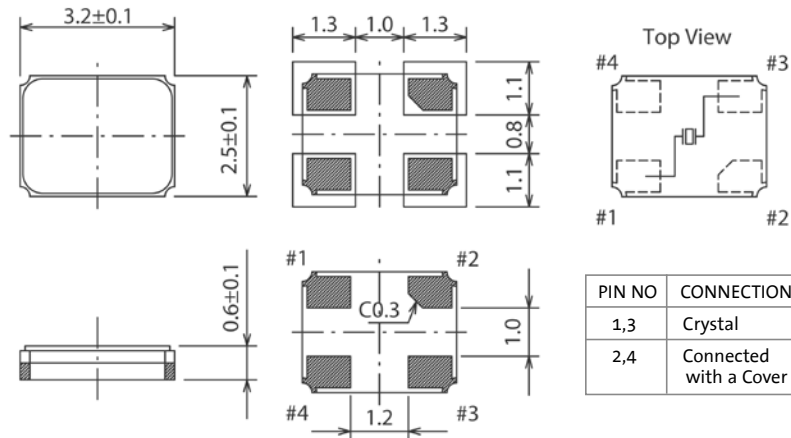
**TYPICAL SPECIFICATIONS**

Model	SX-3225	
Nominal Frequency Range	16.000~50.000MHz	
Standard Frequency	16.000, 24.000, 27.000, 32.000MHz	
Vibration Mode	Fundamental [AT]	
Frequency Tolerance (@ +25°C)	±10 ppm	
Freq. Temp. Characteristics (Ref. to 25°C)	±10 ppm	±15 ppm
Operating Temperature Range	-10°C~+60°C	-30°C~+85°C
Storage Temperature Range	-40°C~+90°C	
Load Capacitance	Series, 10pF, 12pF, 16pF	
Shunt Capacitance	5pF Max.	
Drive Level	10μW (100μW Max.)	
Equivalent Series Resistance	See Table 1	
Aging (+25°C)	±1, ±3 ppm / year Max.	

Please consult with our sales department for other parameters.

\*Package quantity 1,000 pcs max./reel.

**OUTLINE DIMENSIONS**  
Unit:mm



PIN NO	CONNECTION
1,3	Crystal
2,4	Connected with a Cover

TABLE 1: ESR

AT-cut Fundamental	
Frequency (MHz)	ESR (Ω)
16.000 ~ 18.999	100
19.000 ~ 29.999	80
30.000 ~ 50.000	60

All specifications are subject to change without notice.