

JIANGSU HD-CRYSTAL TECHNOLOGY CO., LTD

SMD3225-4 Crystal Resonator

7B010000R01

- 1. Scope:
 - 1.1 This specification applies to the RoHS compliance quartz crystal unit with a frequency of 10.000MHz which will be used in crystal oscillator applications.

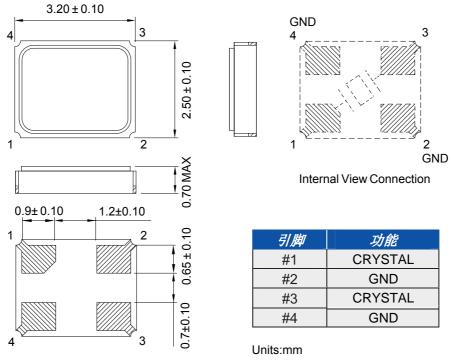


- 2. Construction:
- 2.1 Type of Quartz Resonator: SMD3225-4pads
- 3. **Electrical Characteristics** 3.1 Nominal Frequency(f): 10.000MHz 3.2 Load Capacitance(C₁): 20pF 3.3 Frequency Tolerance($\triangle f/f$): ±10ppm 3.4 Frequency Temperature Stability: ±20ppm 3.5 Resonance Resistance(ohm): 100 ohms Max 3.6 Osc mode: Fundamental mode 3.7 Shunt Capacitance(C_0): 2pF Max 3.8 Drive Level(D_L): 100µW Max 3.9 Operating Temperature Range(T_{OPR}): -20 to + 70°C 3.10 Storage Temperature Range(T_{STG}): -55 to + 125°C 3.11 Insulation Resistance(IR): >500M ohms ±3ppm/Year Max 3.12 Aging($\triangle f_A$):

Reliability Specification

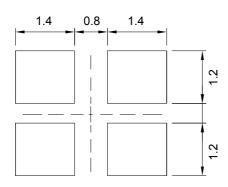
	Item	Condition	Standard
1.	Drop characteristics	Free drop from 75cm height on a hard wooden board for 3 times. (Board is thickness more than 30 mm.)	Frequency change:≤±5ppm Rr as specification
2	Mechanical shock	Device are shocked to half sine wave (1000g) three mutually perpendicular axes each 3 times	Frequency change:≤±5ppm Rr as specification
3.	Shake characteristics	Shake frequency 10~55Hz, cyc1~2 minutes, swing 1.5mm, direction x/y/z, all 30 minutes, test after 1 hours.	Frequency change:≤±5ppm Rr as specification
4.	Humidity characteristics	+40±2°C & 90%~95% R.H. 250 hours	Frequency change:≤±5ppm Rr as specification
5.	Low temperature characteristics	-40±2°C, 250 hours, put in room temperature, test after 1 hours.	Frequency change:≪±5ppm Rr as specification
6.	High temperature characteristics	+85±2°C, 250 hours, put in room temperature, test after 1 hours.	Frequency change:≤±5ppm Rr as specification
7.	Temperature cycling	-30±3°C/30±3 min~+85±2°C/30±3min, 5 cycles	Frequency change:≤±5ppm Rr as specification
8.	Refluence examination	Max150°C 1.Max 180sec 2. Max 10 sec 3.Max 80 sec 4.Max 90 sec	Frequency change:≤±5ppm Rr as specification

Package Outline Dimensions



Bottom View

Suggested Pad Layout



Units:mm

