

JIANGSU HD-CRYSTAL TECHNOLOGY CO., LTD SMD3225-4 Crystal Resonator

7B011059M01

Scope: 1.

1.1 This specification applies to the RoHS compliance quartz crystal unit with a frequency of 11.0592MHz which will be used in crystal oscillator applications.



2. Construction:

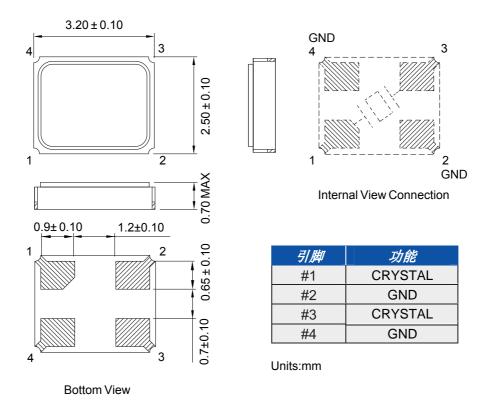
2.1 Type of Quartz Resonator: SMD3225-4pads

3. **Electrical Characteristics**

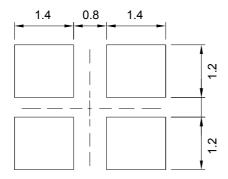
| 3.1 | Nominal Frequency(f): 11.0592MHz | |
|--------------------|--|----------------------------|
| 3.2 | Load Capacitance(C _L): | 12pF |
| 3.3 | Frequency Tolerance(△f/f): | ±10ppm |
| 3.4 | Frequency Temperature Stability: | ±20ppm |
| 3.5 | Resonance Resistance(ohm): | 100 ohms Max |
| 3.6 | Osc mode: | Fundamental mode |
| 3.7 | Shunt Capacitance(C ₀): | 2nE May |
| • | onant Sapasitanos (So). | 2pF Max |
| | Drive Level(D _L): | 2ρε Max 100μW Max |
| 3.8 | , , , | • |
| 3.8 3.9 | Drive Level(D _L): | 100μW Max |
| 3.8 3.9 3.10 | Drive Level(D_L): Operating Temperature Range(T_{OPR}): | 100μW Max -20 to + 70°C |

| | 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℃/30±3 min~+85±2℃/30±3min, 5 cycles | Frequency change:≤±5ppm Rr as specification |
| 8. | Refluence examination | 200°C 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



Suggested Pad Layout



Units:mm

Packing Specification

