



江苏浩都频率科技有限公司
JIANGSU HD FREQUENCY TECHNOLOGY CO., LTD

Specifications For Product

TYPE : Quartz Crystal
SPEC : HC-49SMD/6.7458M/20PF
P/N : 72006745RW1
VER : A/1

| R&D APPR. SIGNATURED | | | DEPT. |
|----------------------|-------|----------|-------|
| ISSUE | CHECK | APPROVAL | |
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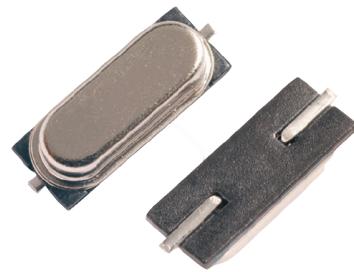
Specification Revision Record Sheet

Product Description

72006745RW1

1. Scope:

1.1 This specification applies to the RoHS compliance quartz crystal unit with a frequency of 6.7458MHz which will be used in crystal oscillator applications.



2. Construction:

2.1 Type of Quartz Resonator: HC-49SMD

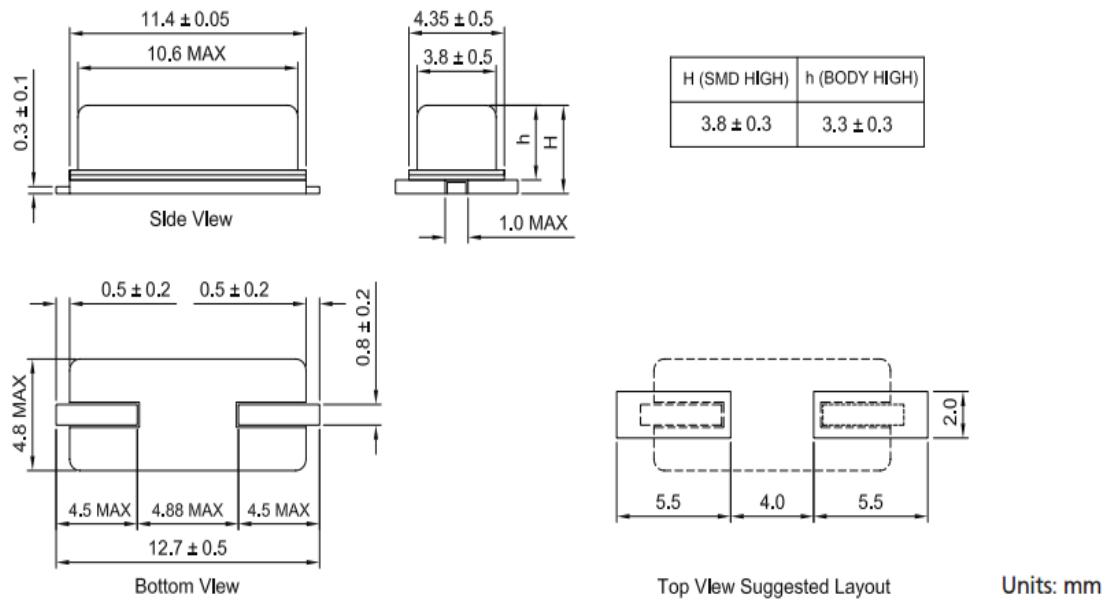
3. Electrical Characteristics

| | |
|---|----------------------|
| 3.1 Nominal Frequency(f): | 6.7458MHZ |
| 3.2 Load Capacitance(C_L): | 20pF |
| 3.3 Frequency Tolerance($\Delta f/f$): | ± 20 ppm |
| 3.4 Frequency Temperature Stability: | ± 20 ppm |
| 3.5 Resonance Resistance(ohm): | 80 ohms Max |
| 3.6 Osc mode: | Fundamental mode |
| 3.7 Shunt Capacitance(C_0): | 7pF Max |
| 3.8 Drive Level(D_L): | 100 μ W typical |
| 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 |
| 3.12 Aging(Δf_A): | ± 5 ppm/Year Max |

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: $\leq \pm 5$ ppm Rr as specification |
| 2 | Mechanical shock | Device are shocked to half sine wave (1000g) three mutually perpendicular axes each 3 times | Frequency change: $\leq \pm 5$ ppm 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: $\leq \pm 5$ ppm Rr as specification |
| 4. | Humidity characteristics | +40 ± 2 °C & 90%~95% R.H. 250 hours | Frequency change: $\leq \pm 5$ ppm Rr as specification |
| 5. | Low temperature characteristics | -40 ± 2 °C, 250 hours, put in room temperature, test after 1 hours. | Frequency change: $\leq \pm 5$ ppm Rr as specification |
| 6. | High temperature characteristics | +85 ± 2 °C, 250 hours, put in room temperature, test after 1 hours. | Frequency change: $\leq \pm 5$ ppm Rr as specification |
| 7. | Temperature cycling | -40 ± 2 °C/30 ± 3 min~+85 ± 2 °C/30 ± 3 min, 5 cycles | Frequency change: $\leq \pm 5$ ppm Rr as specification |
| 8. | Refluence examination | <p>1. Max 200 sec 2. Max 80 sec 3. Max 10 sec</p> | Frequency change: $\leq \pm 5$ ppm Rr as specification |

Package Outline Dimensions



Packing Specification

