

Crystal Oscillator



SPEC NO.: CU-212SMD

Specification

TO:STE Model Name: Crystal Oscillator PART NO: SOC2520-25.000M-30-3.3V-E CUSTOMER PART NO.:

| APPROVAL SHEET | |
|--|-----|
| | Yes |
| Approved? | No. |
| Customer's comments are welcomed here. Pls return this copy as a certificate of your approval by email. | Š |
| | |
| Approved By Date: | |

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Strong Electronics&Technology Limited

History Record

| Date | Part No. | SPEC No. | Description. | Remarks. |
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| | ISO9001:2000 | Approved by | Check by | Design by |
| RoHS Compliant Lead free Lead-free soldering | ISO14001:2004 | May-15-2009 | May-10-2009 | Jan-16-2009 |
| Reversions | Total Page | Xu gang dong | Liu jun | Wang hon |
| CU-02SMD | 7 | 1. yung wing | | er uning room |

SPECIFICATION

1. RANGE:

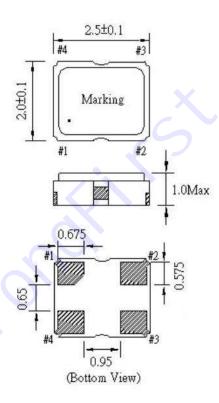
This specification shall cover the characteristics of crystal oscillator

with Strong's P/N: SOC2520-25.000M-30-3.3V-E

2. ELECTRICAL SPECIFICATION

| ITEM | SPECIFICATION | |
|------------------------|-----------------------|--|
| Package | SOC2520 | |
| Output Signal Waveform | CMOS | |
| Frequency Range | 25.000MHz | |
| Current Consumption | 30mA Max 🧹 | |
| Frequency Stability | ±30ppm Max | |
| Load | 15pF | |
| Output Symmetry | 45~55 (at 50%VDD) | |
| Rise Time/Fall Time | 10nS Max. | |
| Temperature Range | Operating: -40~+85°C | |
| | Storage: -55℃ to 105℃ | |
| Supply Voltage | 3.3V+-5% | |
| Output Level | 1V Max | |
| Aging | \pm 3ppm/year Max | |
| Stand-by Function | Tri-state compatible | |

3. DIMENSION



| Pin Connections | INH Function | | |
|-------------------------------------|---------------|-----------------------------|--|
| #1: INH | #1 #3 (Output | | |
| #2 : Gnd #3 : Output #4 : Vdd | Open | Active | |
| | "H"Level | Active | |
| | "L"Level | High Z(Oscillation Stopped) | |

4. MECHANICAL SPECIFICATION

|--|

* Lead pulling test Conditions: Load

| Conditions | : Load | 907.2 gram |
|------------|-------------------------------|------------------|
| | Direction | To the downward |
| | Duration of applied force | 5 seconds |
| Results: | There should be no distortion | n in appearance. |

Metal Cap

Ceramic Base

* Lead bending test

| Lead bending | giesi | |
|--------------|----------------------------------|---------------------------------|
| Conditions: | Load | 453.6 gram |
| | Bending angle | 90° to normal position |
| | Rate of bending | 3 seconds in each cycle |
| | Number of bending | 3 |
| Pogulte | There should be no distortion in | annearance |

Results: There should be no distortion in appearance.

2) Lead solder ability test

| Conditions: | Dipping in solder($+230^{\circ}C \pm 5^{\circ}C$) for 5 seconds | |
|-------------------------------|---|--|
| Results: | More than 95% of surface being tested should be | |
| coated uniformly with solder. | | |

3) Vibration test

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| Conditions: | Frequency | | 10-55Hz |
|-----------------|------------------|--------------|------------------------|
| | Amplitude | | 0.762mm |
| | Sweep | | 1.0 minute |
| | Duration | | 2 hours |
| Results: | Frequency and w | vave form o | f tested products must |
| | Remain within sp | pecification | s. |
| | | | |
| | | | |

4) Drop test

| Conditions: | Method of drop | Natural drop | |
|-------------|---|-----------------|--|
| | Dropping floor | Hard wood board | |
| | Height | 30cm | |
| | Number of drops | 3 times | |
| Results: | Frequency and wave form of tested products must | | |
| | remain within specifications. | | |

5. ENVIRONMENTAL SPECIFICATION

1) Temperature test

Temperature cycling test
Conditions: Steps of cycle

1) At -55°C,30 minutes 2) At +25°C,10 - 15 minutes 3) At +85°C,30 minutes 4) At +25°C,10 - 15 minutes 3 times

Number of cycles

Results: Frequency and wave form of tested products must remain within specifications.

Low Temperature test

| Conditions: | Temperature | -20°C ± 2°C |
|-------------|---|-------------|
| | Length of test | 96 hours |
| Results: | There should be no stain on surface of products. | |
| | Frequency and wave form of tested products must remain within specifications. | |

2) Aging test Conditions:

Temperature Length of test $+85^{\circ}C \pm 20^{\circ}C$ 96 hours

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| | Results: | Deviation of freq | uency must be less than | ±3ppm |
|----|------------------------------|------------------------|---|--------------|
| 3) | Salt spray te Conditions: | st Temperature | +35°C±2°C | |
| | | Length of test | 48 hours | |
| | | NaCI % | 5% | |
| | Results: | There should be no | stain on surface of produ | icts. |
| 4) | Humidity tes | st | | |
| | Conditions: | Temperature | $+40^{\circ}\text{C}\pm2^{\circ}\text{C}$ | |
| | | Relative humidity | 90 - 95% | |
| | | Length of test | 96 hours | |
| | Results: | a. Insulation resistan | ice must be 500 M Ω /100 | Vac. minimum |

b. Resistance and wave form must remain within specifications.

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