



SPEC NO.: CU-212SMD

## Specification

TO:STE508

Model Name: Crystal Oscillator

**PART NO: SOC5032-10.000M-50-3.3V-A**

CUSTOMER PART NO.:

### APPROVAL SHEET

	Yes
Approved?	No.
<p>Customer's comments are welcomed here.</p>          <p>Pls return this copy as a certificate of your approval by email.</p>  <p>Approved By                      Date: _____</p>	

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# History Record

Date	Part No.	SPEC No.	Description.	Remarks.
	ISO9001:2000 ISO14001:2004	Approved by	Check by	Design by
		May-15-2009	May-10-2009	Jan-16-2009
Reversions	Total Page	<i>Xu gang dong</i>	<i>Liu jun</i>	<i>Wang hong</i>
CU-02SMD				

## SPECIFICATION

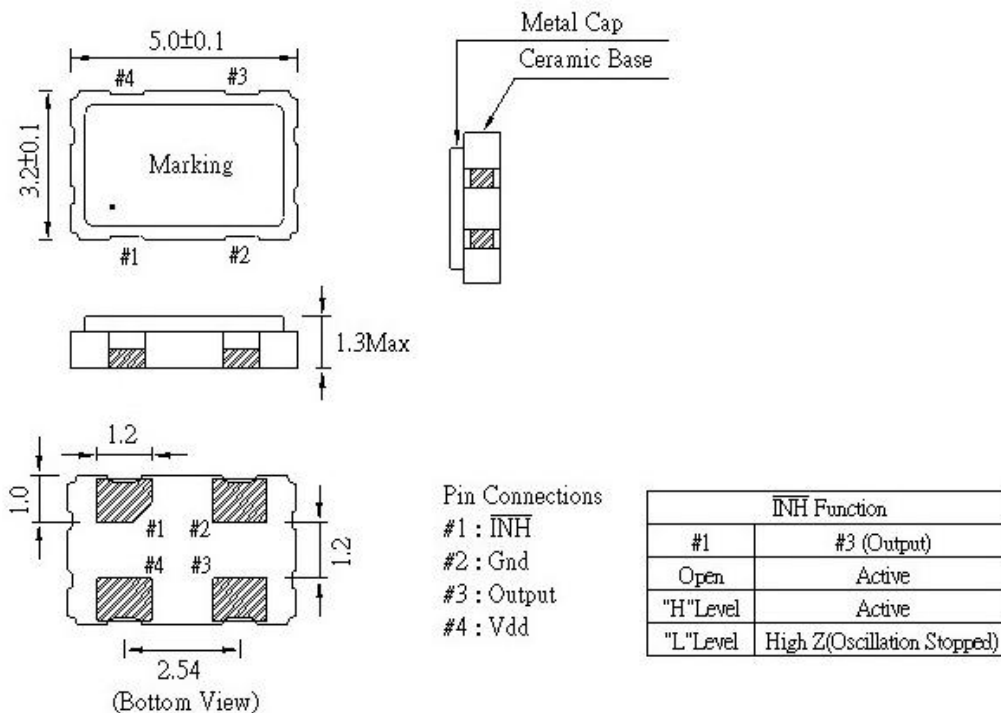
### 1. RANGE:

This specification shall cover the characteristics of crystal oscillator with Strong's P/N: SOC5032-10.000M-50-3.3V-F

### 2. ELECTRICAL SPECIFICATION

ITEM	SPECIFICATION
Package	S5032
Output Signal Waveform	CMOS
Frequency Range	10.000MHz
Current Consumption	30mA Max
Frequency Stability	± 50ppm Max
Load	15pF
Output Symmetry	45~55 (at 50%VDD)
Rise Time/Fall Time	10nS Max.
Temperature Range	Operating: -20~+70°C Storage: -45°C to 85°C
Supply Voltage	3.3V±5%
Output Level	1V Max
Aging	± 3ppm/year Max

### 3. DIMENSION



## 4. MECHANICAL SPECIFICATION

### 1) Terminal Strength

#### \* Lead pulling test

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

#### \* Lead bending test

Conditions:	Load	453.6 gram
	Bending angle	90° to normal position
	Rate of bending	3 seconds in each cycle
	Number of bending	3
Results:	There should be no distortion in appearance.	

### 2) Lead solder ability test

Conditions:	Dipping in solder(+260°C ± 5°C)for 3 seconds
Results:	More than 95% of surface being tested should be coated uniformly with solder.

### 3) Vibration test

Conditions:	Frequency	10 – 55Hz
	Amplitude	0.762mm
	Sweep	1.0 minute
	Duration	2 hours
Results:	Frequency and wave form of tested products must remain within specifications.	

### 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 +105°C, 30 minutes 4) At +25°C, 10 - 15 minutes
	Number of cycles	3 times

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

#### \* Low Temperature test

Conditions:	Temperature	-45°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	+105°C ± 5°C
	Length of test	96 hours

Results: Deviation of frequency must be less than ± 3ppm

### 3) Salt spray test

Conditions:	Temperature	+35°C ± 2°C
	Length of test	48 hours
	NaCl %	5%

Results: There should be no stain on surface of products.

### 4) Humidity test

Conditions:	Temperature	+40°C ± 2°C
	Relative humidity	90 - 95%
	Length of test	96 hours

Results: a. Insulation resistance must be 500 M $\Omega$ /100 Vac. minimum  
b. Resistance and wave form must remain within specifications.