StrongFirst

SPEC NO.: CU-212SMD

Specification

TO:STE
Model Name: Crystal Oscillator
PART NO: SOC5032-2.048M-30-3.3V-E
CUSTOMER PART NO.:

APPROVAL SHEET

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

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History Record

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

SPECIFICATION

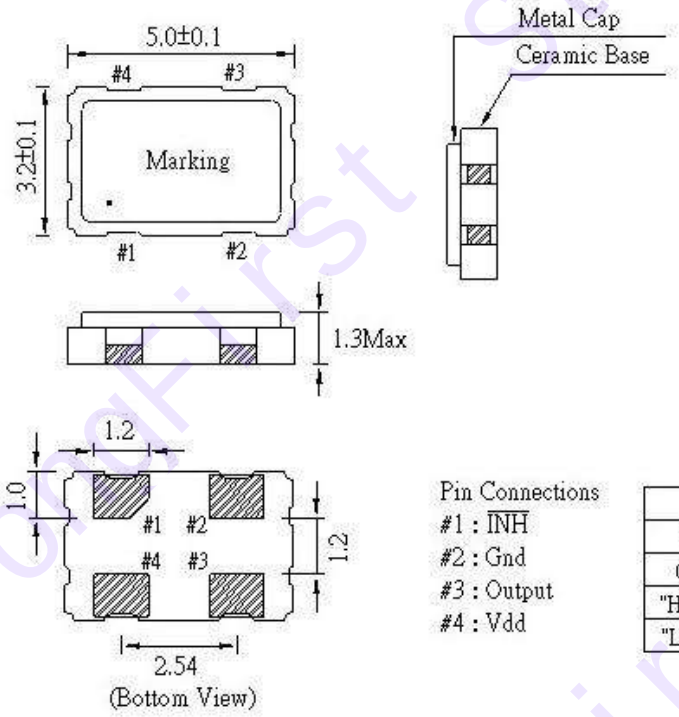
1. RANGE:

This specification shall cover the characteristics of crystal oscillator with Strong's P/N: SOC5032-2.048M-30-3.3V-E

2. ELECTRICAL SPECIFICATION

ITEM	SPECIFICATION
Package	SMD5.0*3.2MM 4 pads
Output Signal Waveform	CMOS
Frequency Range	2.048MHz
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℃ Storage: -55℃ to 125℃
Supply Voltage	3.3V+-5%
Output Level	1V Max
Aging	±3ppm/year Max
Tri-state	Compatible

3. DIMENSION



Pin Connections
#1 : $\overline{INH}$
#2 : Gnd
#3 : Output
#4 : Vdd

$\overline{INH}$ Function	
#1	#3 (Output)
Open	Active
"H"Level	Active
"L"Level	High Z(Oscillation Stopped)

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℃±5℃)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℃,30 minutes
2) At +25℃,10 - 15 minutes
3) At +105℃,30 minutes
4) At +25℃,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℃±2℃
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℃±5℃
Length of test 96 hours

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

3) Salt spray test

Conditions: Temperature +35℃±2℃
Length of test 48 hours
NaCI % 5%

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

4) Humidity test

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

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