SPECIFICATION OF CLOCK OSCILLATOR

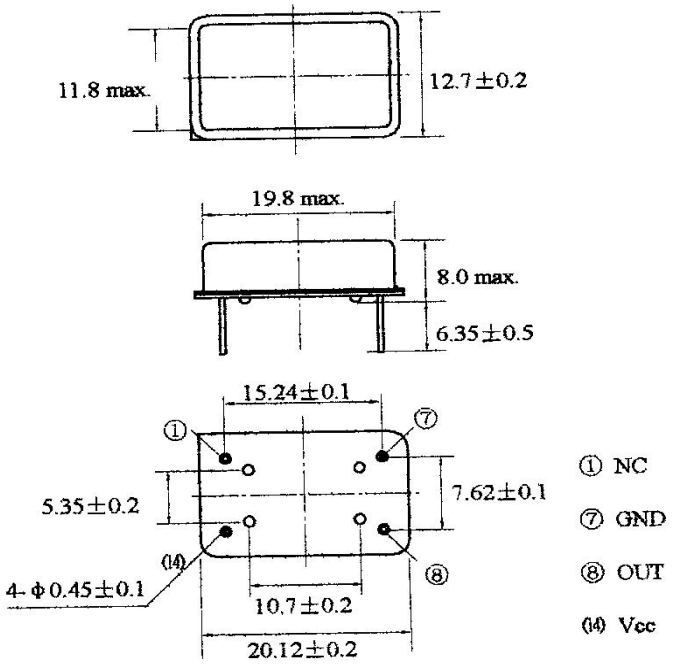
1. SCOPE

This specification shall cover the characteristics of clock oscillator with P/N: OSC14-10.000M-50-5.0V

2. ELECTRICAL SPECIFICATION

ITEM		SPECIFICATION
Package		DIP14 (full size)
Nominal Frequency		100.000MHz
Frequency Tolerance at 25℃		±50PPM
Temperature range		Operating: -20℃ to +70℃ Storage: -30℃to +85℃
Supply Voltage		5.0V±5%
Input current		30mA
Output	Symmetry	40% to 60%
	Rise/fall time	10ns max
Output load TTL/HCMOS		CL=15PF or 10TTL
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(+230℃±5℃)for 5 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 +85℃,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 -20℃±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 +85℃±20℃
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.