

## SPECIFICATION OF CLOCK OSCILLATOR

### 1. Range

This specification shall cover the characteristics of clock oscillator with Strong P/N: OSC8-16.384-25-3.3

### 2. ELECTRICAL SPECIFICATION

ITEM		SPECIFICATION
Package		DIP8 (half size)
Nominal Frequency		16.384MHz
Frequency Tolerance at 25°C		± 25PPM
Temperature range		Operating: 0°C to +70°C Storage: -40°C to +85°C
Supply Voltage		3.3V ± 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. 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°C ± 5°C) 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.	

#### 4.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
	Number of cycles	3 times
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	+85°C ± 20°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
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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 MΩ /100 Vac. minimum  
                                   b. Resistance and wave form must remain within specifications.

5. DIMENSION

