



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date: 2/20/2006

Product Name: SMD Clock Oscillator 6.0 MHz

TST Parts No.: TW0190A

Customer Parts No.: \_\_\_\_\_

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Robert Chang

Approval by: \_\_\_\_\_ T.F. Yang

Date: \_\_\_\_\_ 2006/02/20



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**TST DCC**  
Release document

FR-03S06-02

## SMD Clock Oscillator 6.0 MHz

MODEL NO.: TW0190A

REV. NO.: 1.0

### A. FEATURES:

1. Ultra small package
2. Excellent for high-density packaging.

RoHS Compliant  
 Lead free  
 Lead-free soldering

### B. MAXIMUM RATING:

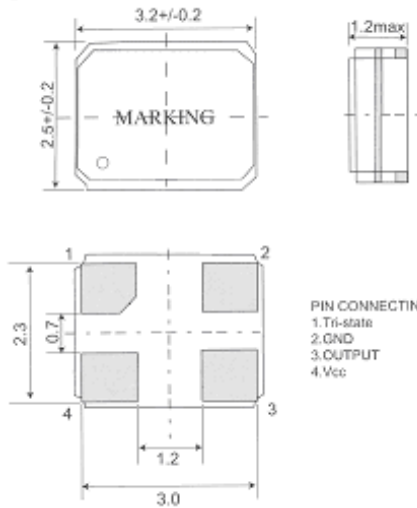
1. Storage Temperature: -55 °C to +125 °C.
2. Operating Temperature: -10 °C to +70 °C.

### C. ELECTRICAL CHARACTERISTICS:

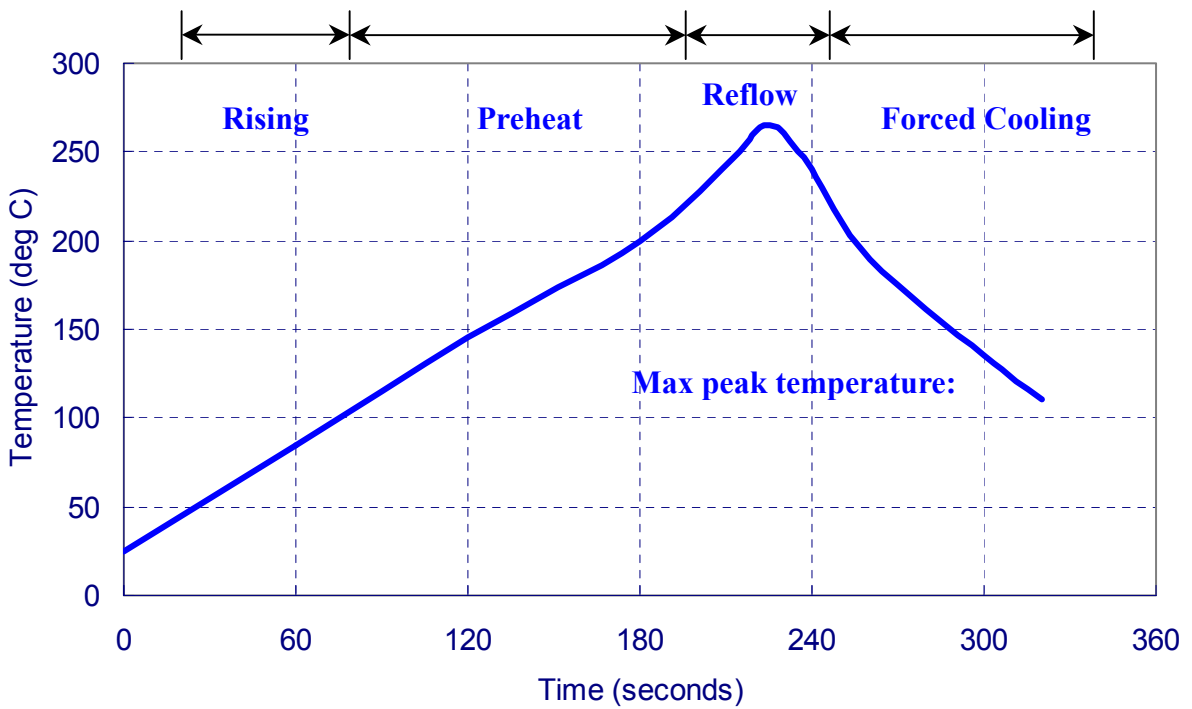
Characteristics	Units	Minimum	Typical	Maximum
Center Frequency	<b>MHz</b>		6.000	
Mode of Oscillation	Fundamental			
Frequency Stability (#note 1)	<b>PPM</b>	-25	-	25
Input Voltage (Operating VDD)	<b>VDC</b>	-	3.0+/-0.3V	-
Input Current	<b>mA</b>	-	-	20
Output	CMOS			
Output Level	CMOS			
Load	<b>pF</b>	-	15	-
"0" Level	<b>VDC</b>	-	-	0.3
"1" Level	<b>VDC</b>	2.7	-	-
Symmetry (TW/T*100%) Duty Cycle	<b>%</b>	40%	50%	60%
Rise Time (10%->90% VDD)	<b>nSec</b>	-	-	10
Fall Time (90%->10% VDD)	<b>nSec</b>	-	-	10
Enable/Disable Function		PIN 1: High or Open, PIN 3:Enable PIN 1: Low, PIN 3:Disable		
Package size		SMD3.2X2.5X1.1mm		

#Note 1: Frequency stability includes 25C tolerance, operating temperature range, aging and voltage or load change.

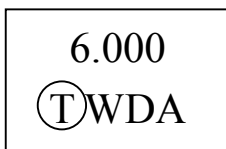
### D. OUTLINE DRAWING: (Unit: mm)



**E. SOLDERING REFLOW PROFILE:**



**F. MARKING:**



Line 1: 6.000

Line 2: TWDA

Where W stand for product code and D for date code

1. Product Code Table:

Year	2001	2002	2003	2004
	2005	2006	2007	2008
<b>Product Code</b>	<b>W</b>	<b>w</b>	<b><u>W</u></b>	<b><u>w</u></b>

