TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Approval Sheet For Product Specification

Issued Date: 03/03/2003

Product Name: SMD Clock Oscillator 36.000 MHz

TST Parts No.: TW0108A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Robert Chang

Approval by: T.F. Yang

Date: 2003/03/03

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SMD Clock Oscillator 36.000MHz

MODEL NO.: TW0108A

REV. NO.: 1

A. FEATURES:

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

RoHS Compliant
Lead free
Lead-free soldering

B. MAXIMUM RATING:

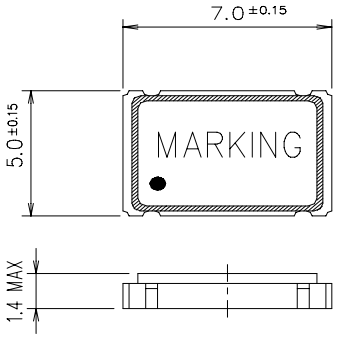
1. DC Voltage: 12 VDC.
2. Storage Temperature: -55 °C to +125 °C.
3. Operating Temperature:-10 °C to +70 °C.

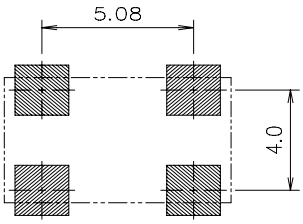
C. ELECTRICAL CHARACTERISTICS:

Characteristics	Units	Minimum	Typical	Maximum
Center Frequency	**MHz**		36.0000	
Frequency Stability (#note 1)	**ppm**	-25	-	25
Input Voltage (Operating VDD)	**VDC**	-	3.3+/-10%	-
Input Current	**mA**	-	-	12
Output				
Load	**pF**	-	15	-
"0" Level	**VDC**	-	-	0.33
"1" Level	**VDC**	2.97	-	-
Symmetry (TW/T*100%) Duty Cycle	**%**	40%	-	60%
Rise Time (10%->90% VDD)	**nSec**	-	-	10
Fall Time (90%->10% VDD)	**nSec**	-	-	10
Start-Up Time	**mSec**	-	-	10
Enable/Disable Function		PIN 1: High or Open, PIN 3:Enable PIN 1: Low, PIN 3:Disable		
Package size		SMD5.0X7.0X1.4mm		

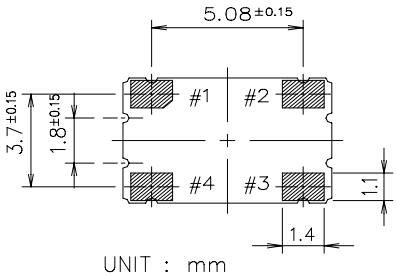
#Note 1: Frequency stability includes 25℃ tolerance, operating temperature range, aging and voltage or load change.

D.OUTLINE DRAWING: (Unit: mm)





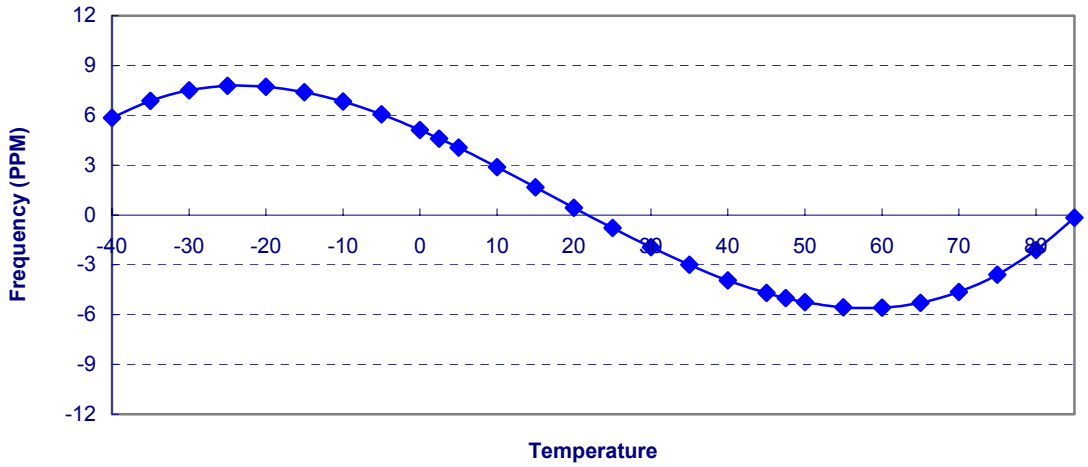
Recommended Soldering Pattern



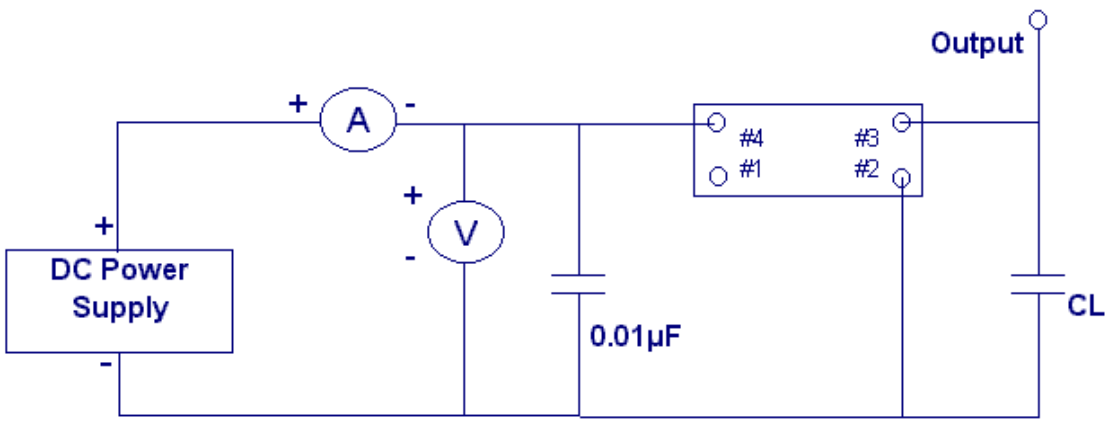
UNIT : mm

PIN#	FUNCTION
1	NO CONNECT/3-STATE
2	CIRCUIT AND COVER GROUND
3	OUTPUT
4	VDD

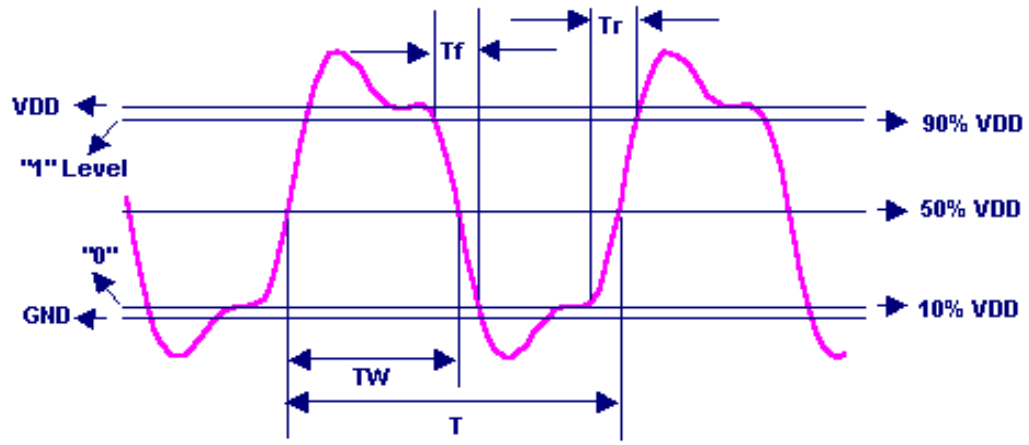
E. FREQUENCY STABILITY OVER TEMPERATURE (TYPICAL):



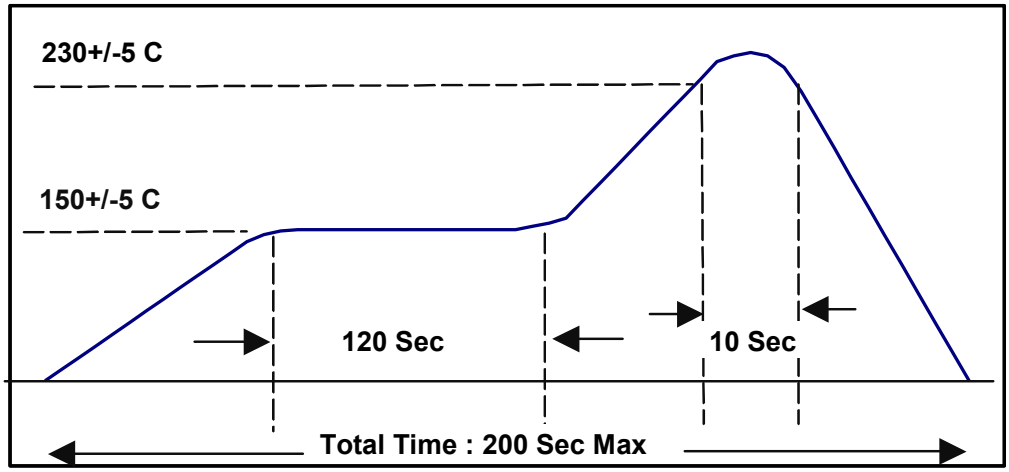
F. TEST CIRCUIT:



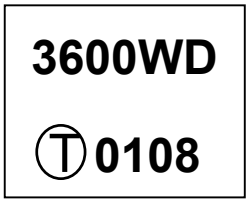
G. OUTPUT WAVEFORM (TYPICAL):



H. SOLDERING REFLOW PROFILE:



I. MARKING:



Where W stand for product code and D for date code

1. Product Code Table:

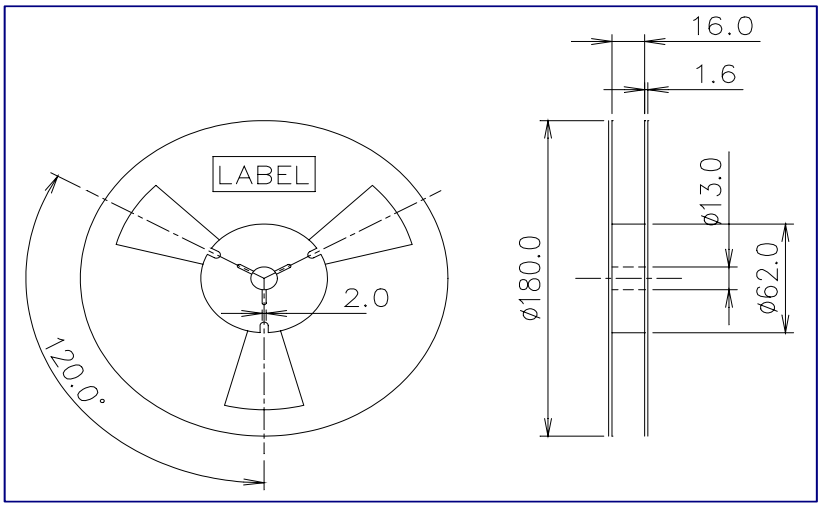
Year	2001 2005	2002 2006	2003 2007	2004 2008
Product Code	W	w	W	w

Date Code Table:

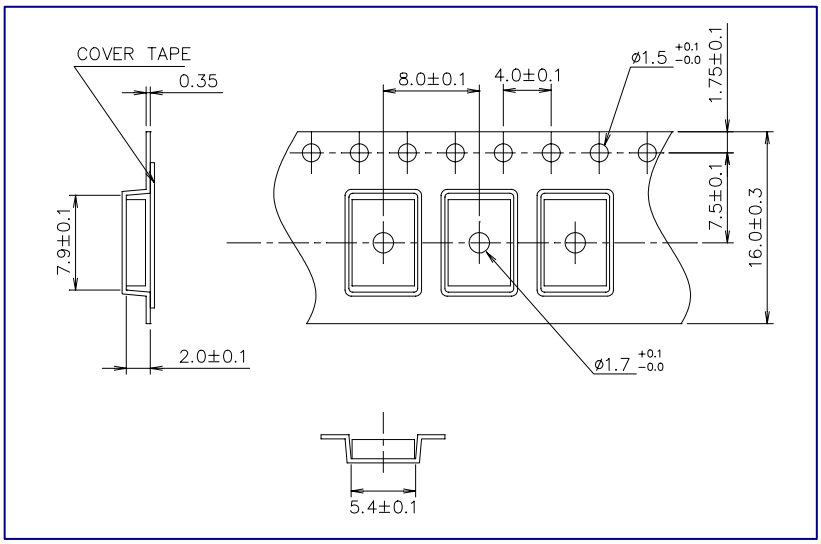
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	**WK15**	**WK16**	**WK17**	**WK18**	**WK19**	**WK20**	**WK21**	**WK22**	**WK23**	**WK24**	**WK25**	**WK26**
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	**WK28**	**WK29**	**WK30**	**WK31**	**WK32**	**WK33**	**WK34**	**WK35**	**WK36**	**WK37**	**WK38**	**WK39**
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	**WK41**	**WK42**	**WK43**	**WK44**	**WK45**	**WK46**	**WK47**	**WK48**	**WK49**	**WK50**	**WK51**	**WK52**
n	o	p	q	r	s	t	u	v	w	x	y	z

J. PACKING:

1.REEL DIMENSION (Unit: mm)



2.TAPE DIMENSION (Unit: mm)



3.PACKING DIRECTION

The dot or the logo of marking should be close to the hole of tape.