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
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Approval Sheet For Product Specification

Issued Date: 11/28/2006 (REV. NO: 1)

Product Name: SMD 7.0x5.0 16.6666MHz Crystal Oscillator

TST Parts No.: TW0231A

Customer Parts No. :_____

Company:_____

Division:_____

Approved by:_____

Date:_____

Checked by: Ryan Huang

Approval by: Robert Chang

Date: 11/28/2006

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SMD 7.0x5.0 16.6666MHz Crystal Oscillator

MODEL NO.: TW0231A REV. NO: 1

Features:

RoHS Compliant
Lead free
Lead-free soldering

- Surface Mount Seam Weld Package
- Excellent Reliability Performance
- Good Frequency Perturbation and Stability over temperature

Application:

- 3.3 V Supply Voltage Operation / Complementary CMOS Output
- Option-able stand-by function for output (Tri-state output).

Electrical Specifications:

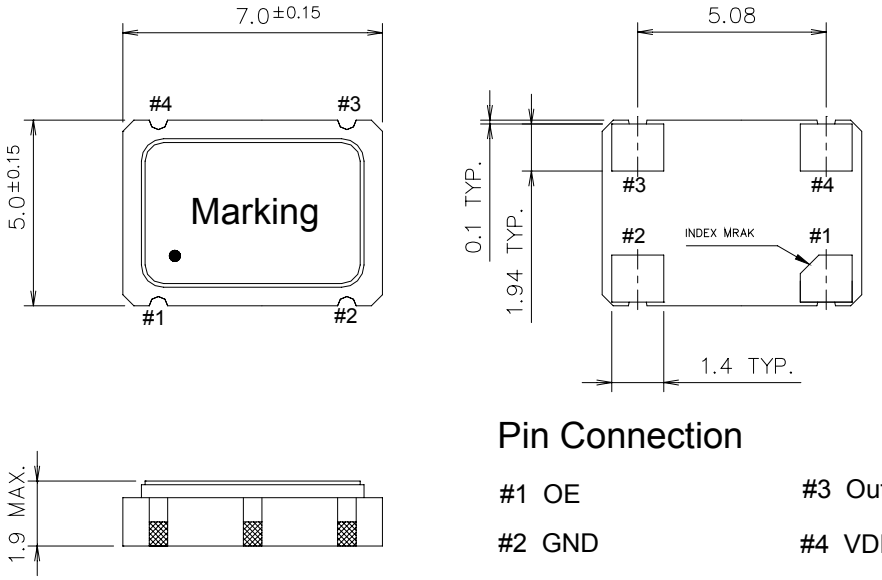
Measurement shall be made under room temperature and humidity at below conditions.

Temperature: 25+/-3 ℃

Humidity: Below 70% RH

TW0231A	**Specifications**
Nominal Frequency, Fo	16.666600 MHz
Storage Temperature Range	-40°C to +85°C
Operating Temperature Range	0°C to +75°C
Power Supply Voltage, Vcc	3.3 V +/- 10%
Load	10KΩ // 15pF
“0” Level “1” Level	0.33 V max 2.97 V min
Power Supply Current, Icc	30 mA max
Frequency Stability over Operating Temperature Range	+/- 25 ppm (referred to the value at 25°C)
Frequency Make Tolerance (FL)	+/-25 ppm max
Duty Cycle	40% ~ 60%
Rise Time (10% -> 90% of final RF level in Vp-p) Fall Time (90% -> 10% of final RF level in Vp-p)	10 nsec max. 10 nsec max.
Enable/Disable Function	PIN 1: High or Open, PIN 3:Enable PIN 1: Low, PIN 3:Disable

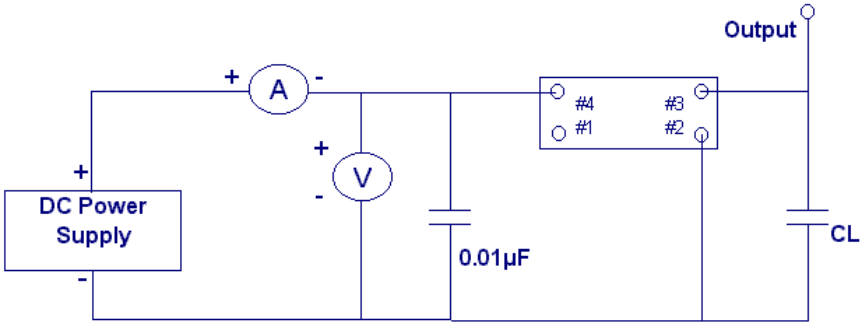
Mechanical Dimensions: (Unit: mm)



Pin Connection

#1 OE	#3 Output
#2 GND	#4 VDD

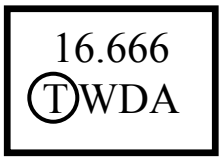
Test Circuit:



Marking:

Line 1 : Frequency

Line 2 : TST Logo + Crystal Oscillator Product Code + Date Code



Product Code Table

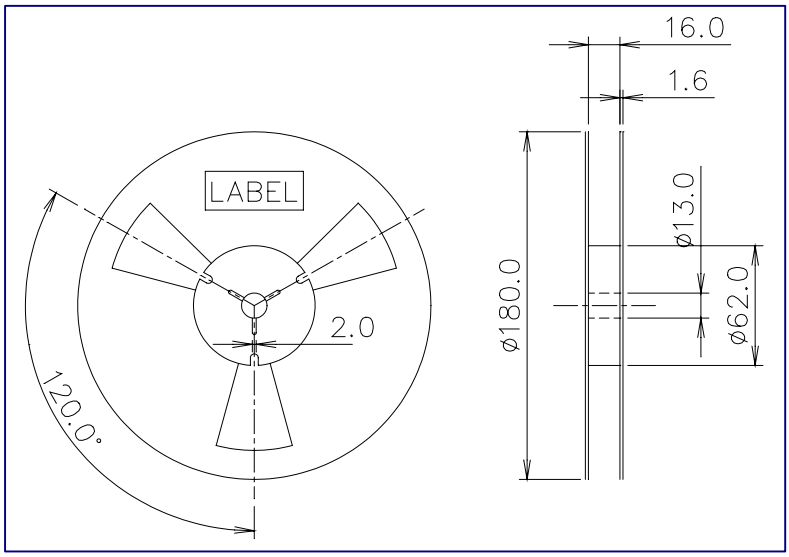
Year	2001 2005	2002 2006	2003 2007	2004 2008
Product Code	W	w	W	w

Date Code Table

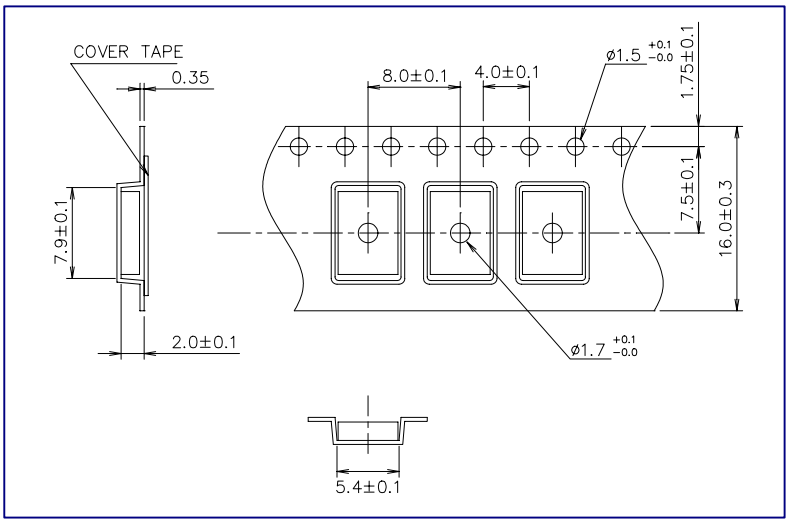
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

Packing:

- **Reel Dimension (Unit: mm)**



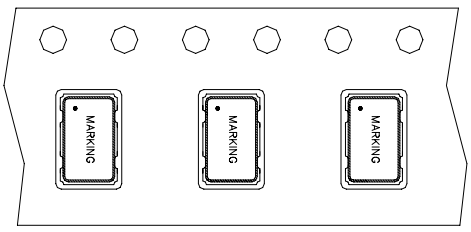
- **Tape Dimension (Unit: mm)**



[NOTE]:

1. Unless otherwise specified tolerance on dimension +/-0.1 mm.
2. Material: conductive polystyrene with color black
3. 10 pitch cumulative tolerance +/-0.2 mm.
4. Packing Direction: dot or the logo of marking should be close to the hole of tape.

- **PACKING DIRECTION:**



- **PACKING QUANTITY:** 1K Pcs / Reel

Reflow Profile:

