



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Approval Sheet For Product Specification

Issued Date: 12/7/2005 (REV. NO: 1)

Product Name: SMD 5.0x3.2 67.5MHz Crystal Oscillator

TST Parts No.: TW0174A

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

|                    |
|--------------------|
| Company: _____     |
| Division: _____    |
| Approved by: _____ |
| Date: _____        |

Checked by: \_\_\_\_\_ Ryan Huang

Approval by: \_\_\_\_\_ TF Yang

Date: \_\_\_\_\_ 12/7/2005



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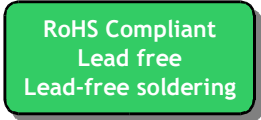
## SMD 5.0x3.2 67.5MHz Crystal Oscillator

MODEL NO.: TW0174A

REV. NO: 1

### Features:

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

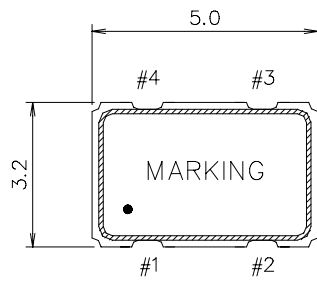


### Electrical Characteristics:

| TW0174A                                      | Specifications   |
|--|--|
| Nominal Frequency, Fo                        | 67.500000 MHz  |
| Storage Temperature Range                    | -40°C to +85°C   |
| Operating Temperature Range                  | 0°C to +70°C   |
| Power Supply Voltage, Vcc                    | 3.3 V +/- 0.1V   |
| Load   | 10KΩ // 15pF   |
| “0” Level<br>“1” Level                       | 0.3 V max<br>3 V min   |
| Power Supply Current, Icc                    | 20 mA max  |
| Frequency Accuracy <sup>1</sup>              | +/-50 ppm max  |
| Duty Cycle                                   | 40% ~ 60%  |
| Turn-on Time (90% of final RF level in Vp-p) | 10 nsec max.   |
| Enable/Disable Function                      | PIN 1: High or Open, PIN 3:Enable<br>PIN 1: Low, PIN 3:Disable |

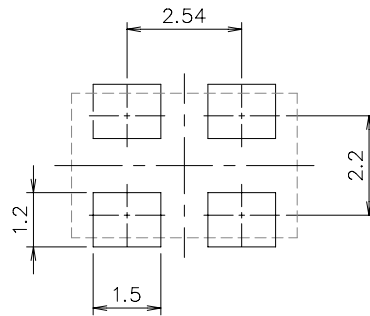
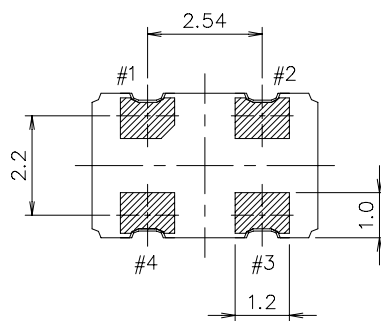
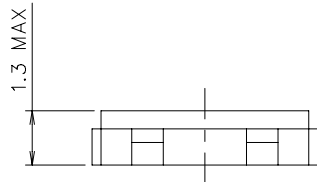
#Note 1: Frequency accuracy includes 25C tolerance, operating temperature range 0 to 70 deg C, aging and voltage or load change.

# Mechanical Dimensions: (Unit: mm)



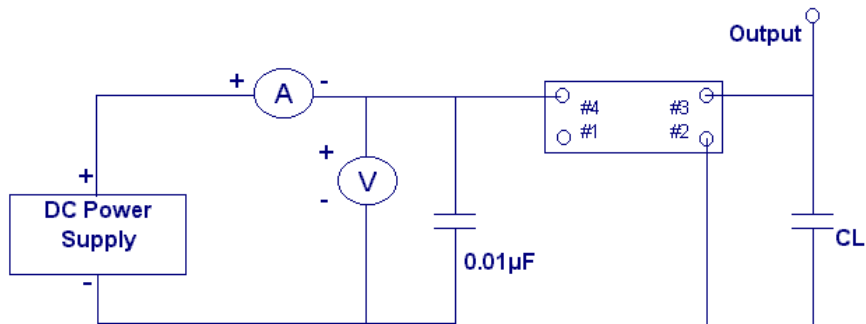
UNIT: mm

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



Recommended Soldering Pattern

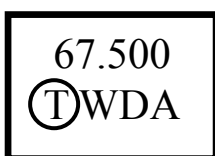
## Test Circuit:



## Marking:

Line 1: 67.500 (Frequency)

Line 2:  $\text{\textcircled{T}}$ WDA (TST logo + Product Code + Data Code + TST Internal Code)



## Product Code Table

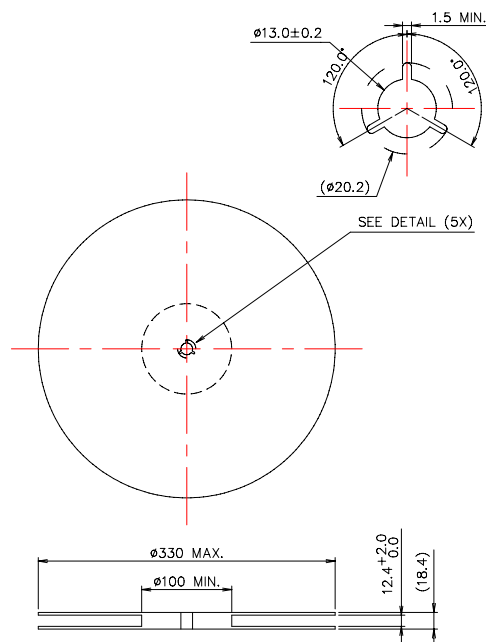
| Year         | 2001<br>2005 | 2002<br>2006 | 2003<br>2007 | 2004<br>2008 |
|--------------|--------------|--------------|--------------|--------------|
| Product Code | W            | w            | <u>W</u>     | <u>w</u>     |

## Date Code Table

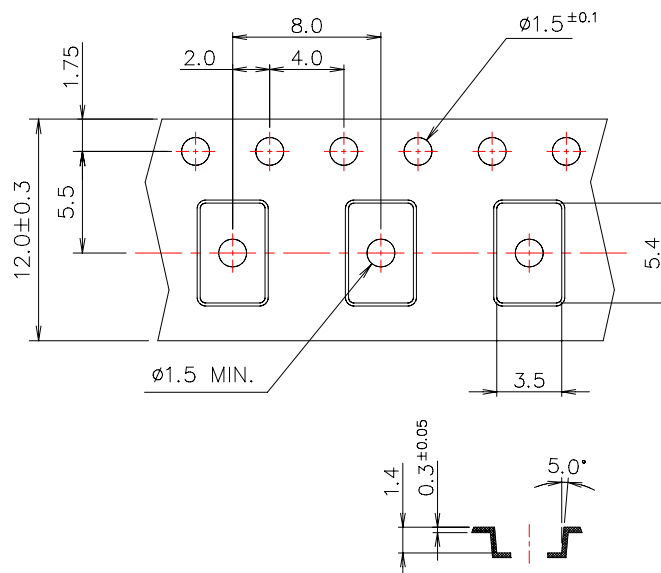
|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
| A    | B    | C    | 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:

### 1. Reel Dimension (Unit: mm)



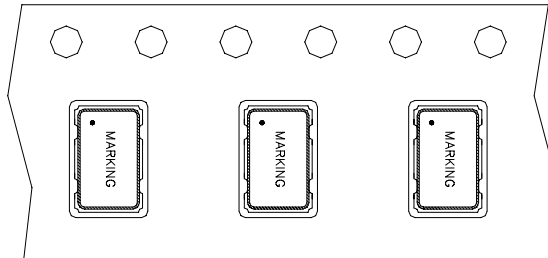
### 2. Tape Dimension (Unit: mm)



[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.

### 3. PACKING DIRECTION:



### Reflow Profile:

