



# 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: 12/15/2008 (REV. NO: 2.0)

Product Name: SMD 6.0x3.5 16MHz Crystal Unit

TST Parts No.: TZ0277A

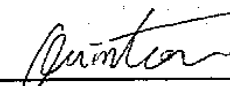
Customer Parts No. : \_\_\_\_\_

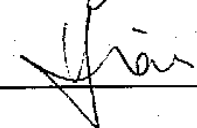
Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: Quinton Lo 

Approval by: Yian Chen 

Date: 12/15/2008



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## 16.000MHz Crystal Resonator

MODEL NO.: TZ0277A

REV. NO.: 2.0

### Electrical Specifications:

|                                                | Specification            |
|------------------------------------------------|--------------------------|
| Nominal Frequency                              | 16.000000 MHz            |
| Mode of Vibration                              | Fundamental              |
| Storage Temperature Range                      | -40°C to +85°C           |
| Operating Temperature Range                    | 0°C to +40°C             |
| Frequency Stability over Operating Temperature | +/-20 ppm                |
| Frequency Make Tolerance                       | +/-10 ppm @ 25°C +/- 3°C |
| Max. Value of the Series Resistor              | 40Ω max.                 |
| Max. Value of the Parallel Capacitor           | 7 pF max.                |
| Drive Level                                    | 100uW nominal            |
| Load Capacitance-CL                            | 12 pF                    |
| Aging                                          | +/-3.0 ppm/year @25°C    |
| Marking                                        | Laser marking            |
| Insulation Resistance                          | 500M Ω min at DC 100V    |

| Mechanical Dimensions (mm):                                                                                                                                                                                     | Marking:                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <p>Top View: 6.0 ± 0.2 (width), 3.5 ± 0.2 (height), Marking area.</p> <p>Bottom View: 3.0 ± 0.2 (width), 1.5 ± 0.2 (height), pins #1, #2, #3, #4. #2 &amp; #4 GND.</p> <p>Side View: 1.10 Max. (thickness).</p> | <div>16.000</div> <div>277ⓅZDXX</div> <p>“Z” for Year code<br/>“D” for date code</p> |

## Year Code Table

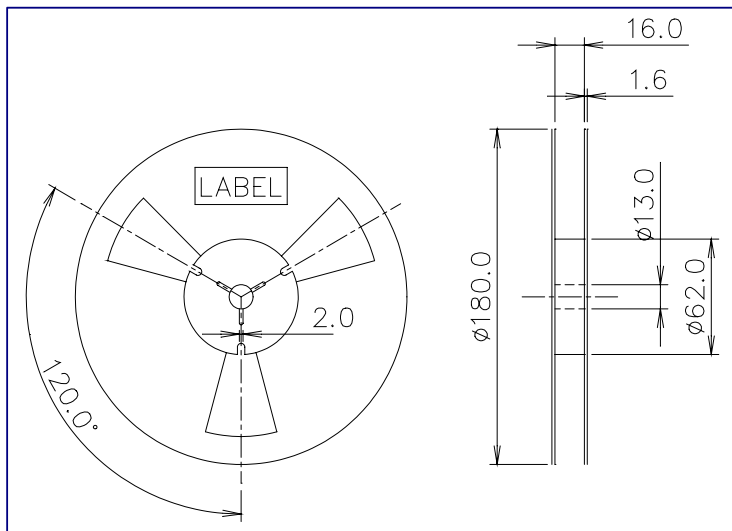
| Year         | 2008     | 2009 | 2010 | 2011     |
|--------------|----------|------|------|----------|
|              | 2012     | 2013 | 2014 | 2015     |
| Product Code | <u>z</u> | Z    | z    | <u>Z</u> |

## Date Code Table

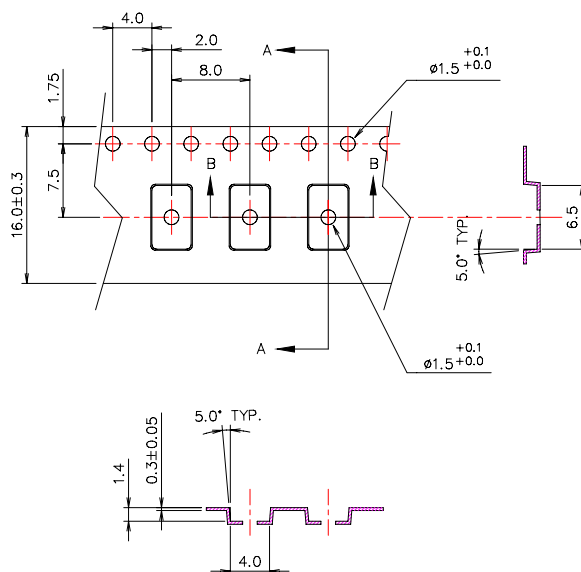
| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| A    | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    |
| WK14 | WK15 | WK16 | 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)



### 3. PACKING DIRECTION

The first letter("2") of marking should be close to the hole of tape.