

### TAI-SAW TECHNOLOGY CO., LTD. No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,

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

# **Product Specifications Approval Sheet**

Product Description: Crystal Unit SMD 3.2x2.5 26.00MHz

TST Part No.: TZ0234D

Customer Part No.:\_\_\_\_\_

Date:	06/11/2014	, ] (
Approved by:	Kelly Huang	Kelly Huang
Checked by:	Chia Haur Rau	CH
Date:		
Approved by :		
Division:		
Company:		
Customer signature re	quired	

- 1. Customer signed back is required before TST can proceed with sample build and receive orders.
- 2. Orders received without customer signed back will be regarded as agreement on the specifications.
- 3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.

### TAI-SAW TECHNOLOGY CO., LTD. Crystal Unit SMD 3.2x2.5 26.00MHz

#### MODEL NO.: TZ0234D

**REV. NO.: 1** 

### **Revise:**

Rev.	Rev. Page	Rev. Account	Date	Ref. No.	Revised by
1	N/A	Initial release	06/11/14'	N/A	Chia Haur Rau

### TAI-SAW TECHNOLOGY CO., LTD. Crystal Unit SMD 3.2x2.5 26.00MHz

#### MODEL NO.: TZ0234D

**REV. NO.: 1** 

**RoHS Compliant** 

Lead free Lead-free soldering

### Features:

- Surface Mount Hermetic Package
- Excellent Reliability Performance
- Good Frequency Perturbation and Stability over temperature
- Ultra Miniature Package

### **Description and Applications:**

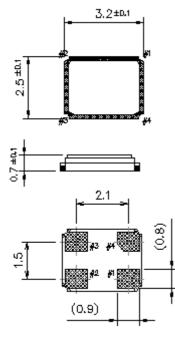
Surface mount 3.2mmx2.5mm crystal unit for customer for use in wireless communications devices, especially for a need of ultra miniature package for mobility.

### **Electrical Specifications:**

TZ0234D	Specification
Nominal Frequency	26.000000 MHz
Mode of Oscillation	Fundamental
Storage Temperature Range	-40°C to +105°C
Operating Temperature Range	-40°C to +85°C
Frequency Stability over Operating Temperature	+/- 20 ppm (referred to the value at 25°C)
Frequency Make Tolerance (FL)	+/- 10 ppm @ 25°C +/- 3°C
Equivalent Series Resistance (ESR)	60 Ω max.
Nominal Drive Level	10uW typical and 100uW max
Shunt Capacitance (Co)	3.0 pF max
Load Capacitance (CL)	10 pF
Insulation Resistance	500 MΩ min./DC 100V
Marking	Laser Marking
Unit Weight	0.017+/-0.005 g

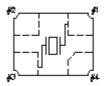
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### Mechanical Dimensions (mm): Base 1

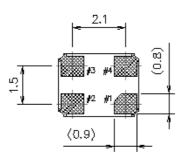


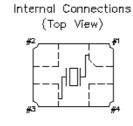
	Pin Connection
#1 pin	IN /OUT
#2 pin	GND
#3 pin	IN /OUT
#4 pin	GND
#4 pin	GND

Internal Connections (Top View)

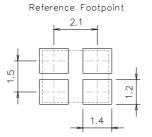


Base 2





# Recommended Land Pattern: (unit: mm)



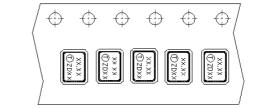
### Marking:

Line 1: Frequency (26.000)

Line 2: TST Logo + Crystal Product Code + Date Code + Traceability code (1 or 2 letters)







#### The inner vision of Pin#1, Pin#4 side is XTAL blank mounting pad.

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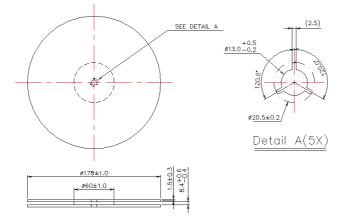
#### **Product Code Table**

	2009	2010	2011	2012
Year	2013	2014	2015	2016
	2017	2018	2019	2020
product code	Z	Z	<u>Z</u>	Z

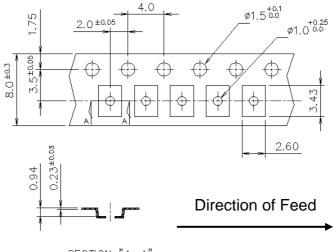
#### **Date Code Table**

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
Α	В	С	D	E	F	G	Н	I	J	К	L	М
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	0	Р	Q	R	S	Т	U	V	W	Х	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
а	b	С	d	е	f	g	h	i	j	k	I	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	0	р	q	r	s	t	u	v	w	х	у	z

### **Reel Dimensions (mm):**



#### Tape Dimensions (mm):



#### SECTION "A-A"

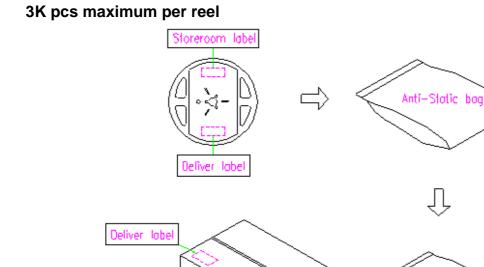
#### [NOTE]

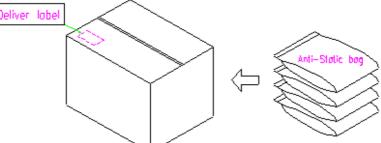
- 1 UNIT : mm.
- 2 UNLESS OTHERWISE SPECIFIED TOLERANCEON DIM. +/-0.1mm.
- 3 MATERIAL : CONDUCTIVE POLYSTYRENE.
- 4 COLOR : BLACK.
- 5 10 PITCHES CUMULATIVETOLERANCE +/-0.2mm.

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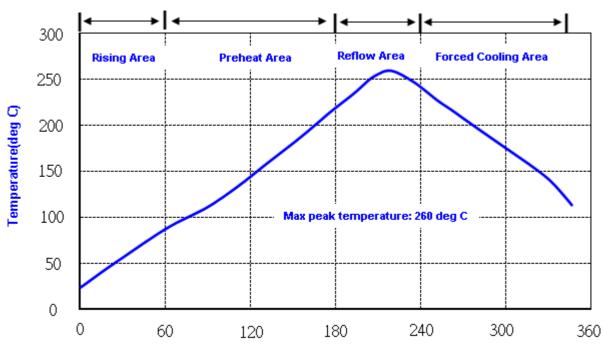
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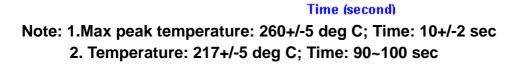
# Packing Quantity/Packing:











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# **Reliability Specifications**

Test name	Test process / method	Reference standard					
Mechanical characteristics							
resistance to Soldering heat (IR reflow)	Temp./ Duration : 260°C /10sec ×2 times Total time : 4min.(IR-reflow)	EIAJED-4701 -300(301)M(II)					
Vibration	Total peak amplitude : 1.5mmVibration frequency : 10 to 55 HzSweep period : 1.0 minuteVibration directions : 3 mutually perpendicularDuration : 2 hr / direc.directions : 3 impacts per axis	MIL-STD 202F method 201A					
Mechanical Shock	directions : 3 impacts per axis Acceleration : 3000g's, +20/-0 % Duration : 0.3 ms (total 18 shocks) Waveform : Half-sine	MIL-STD 202F method 213C					
Solderability	Solder Temperature:265±5°C Duration time: 5±0.5 seconds.	MIL-STD 883G method 2003					
Environmenta	I characteristics						
Thermal Shock	Heat cycle conditions -55 $^{\circ}$ C (30min) $\longleftrightarrow$ 125 $^{\circ}$ C (30min) * cycle time : 10 times	MIL-STD 883G method 1010.7					
Humidity test	Temperature : 70 ± 2 °C Relative humidity : 90~95% Duration : 96 hours	MIL-STD 202F method 103B					
Dry heat ( Aging test )	Temperature : 125 ± 2 °C Duration : 168 hours	MIL-STD 883G method 1008.2 condition C					
PCT test	Pressure: 2.06kg/cm <sup>2</sup> (2.03*10 <sup>5</sup> pa) Temperature : 121 ± 2 °C Relative humidity : 100% Duration : 24 hours	EIAJED-4701-3 B-123A					

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单击下面可查看定价,库存,交付和生命周期等信息

>>TAI-SAW(台湾嘉硕)