



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Product Specifications Approval Sheet

Product Name: TCXO SMD 3.2x2.5 26MHz

TST Part No.: TX0203A

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

Company: _____
Division: _____
Approved by: _____
Date: _____

Checked by: \_\_\_\_\_ Ginger Huang *Ginger Huang*

Approved by: \_\_\_\_\_ Kelly Huang *Kelly Huang*

Date: \_\_\_\_\_ 04/03/2013

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.



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**TCXO SMD 3.2x2.5 26MHz**

MODEL NO.: TX0203A

REV. NO.: 4.0

**Revise:**

Rev.	Rev. Page	Rev. Account	Date	Ref. No.	Revised by
1	N/A	Change to new format	02/02/10'	N/A	C.C. Hsu
2	P5	Change Marking	04/03/13'	ECN-201300107	Ginger Huang



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## TCXO SMD 3.2x2.5 26MHz

MODEL NO.: TX0203A

REV. NO.: 4.0

### Features:

- Ultra Miniature SMD Package
- Good Frequency Stability
- Good Phase Noise Response

RoHS Compliant  
Lead free  
Lead-free soldering

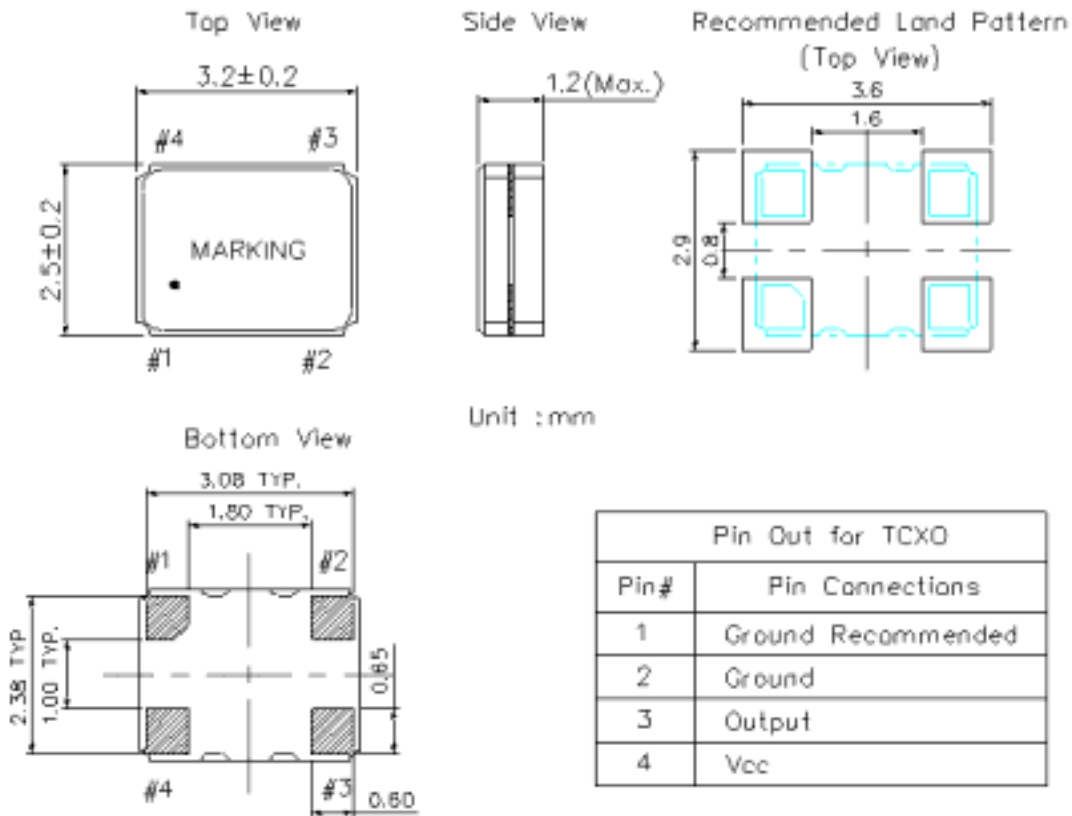
### Description and Applications:

Surface mount 3.2mmx2.5mm TCXO for use in wireless telecommunication devices.

### Electrical Specifications:

TX0203A	Specifications
Nominal Frequency, Fo	26.000000 MHz
Storage Temperature Range	-40°C to +85°C
Operating Temperature Range	-30°C to +80°C
Power Supply Voltage, Vcc	2.775 V ± 5%
Output Voltage with Load 10pF//10KΩ, Vout	0.8 Vp-p min
Output Waveform	Clipped Sinewave
Power Supply Current, Icc	2.0 mA max
Frequency Tolerance after reflow	+/- 1.0 ppm max @ 25°C +/- 3°C
Frequency Stability	
a. Vs. Temperature (-30~80°C)	+/- 0.5 ppm reference to the middle point between minimum and maximum frequency value
b. Vs. Load varied 10pF//10KΩ+/-10%	+/- 0.2 ppm
c. Vs. Supply Voltage varied 2.775V+/-5%	+/- 0.2 ppm
Start Up Time (90% of final RF level in Vp-p)	2.0 msec max.
Harmonics	-5.0 dBc max
SSB Phase Noise(@1KHz Carrier Offset)	-130 dBc/Hz max
Marking	Laser marking

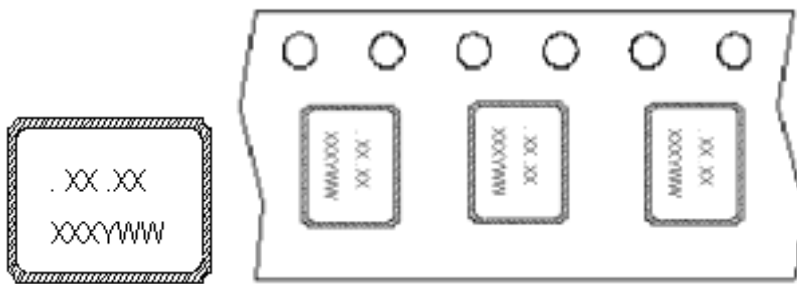
## Mechanical Dimensions (mm):



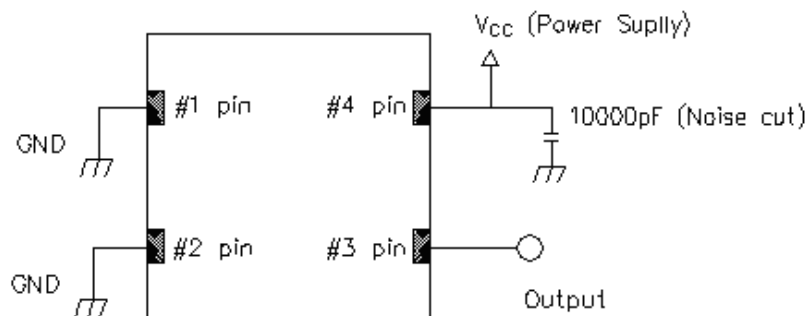
## Marking :

Line 1: Frequency (.26.00)

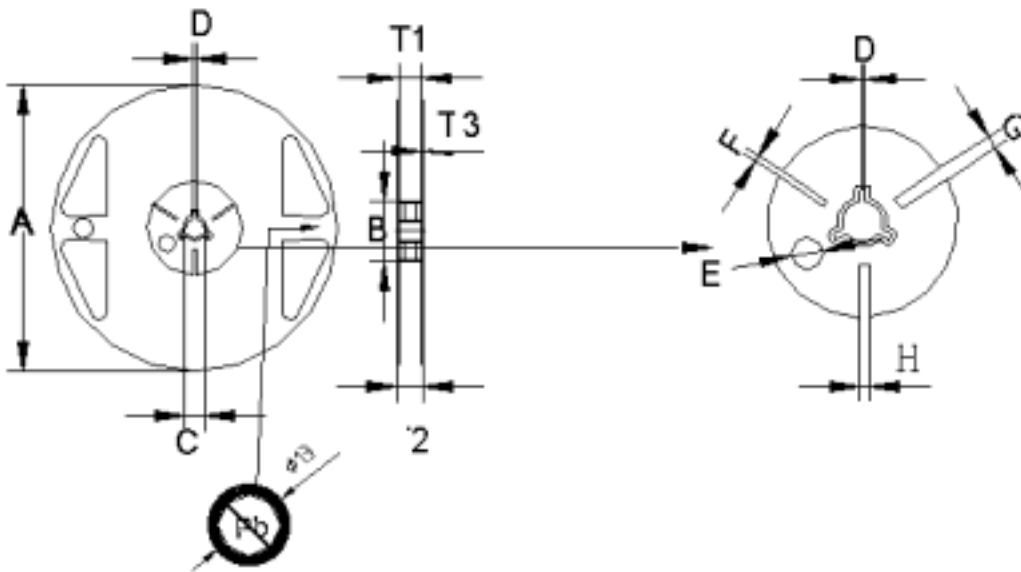
Line 2: XXX (Traceability code) + Year Code (Y: 2 means 2012) +  
Week Code (WW: 12 means wk12)



## Recommended Circuit



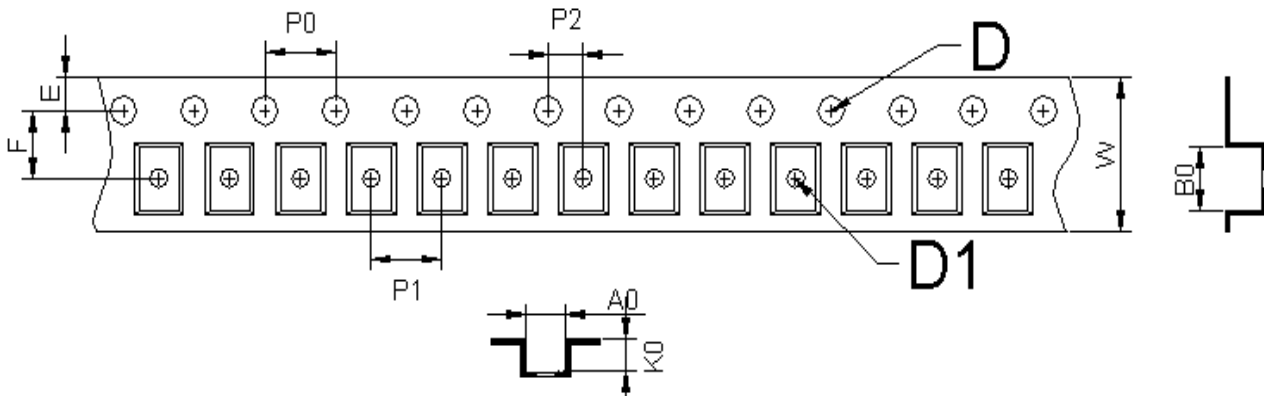
Packing (mm):



**1. Reel Dimension**

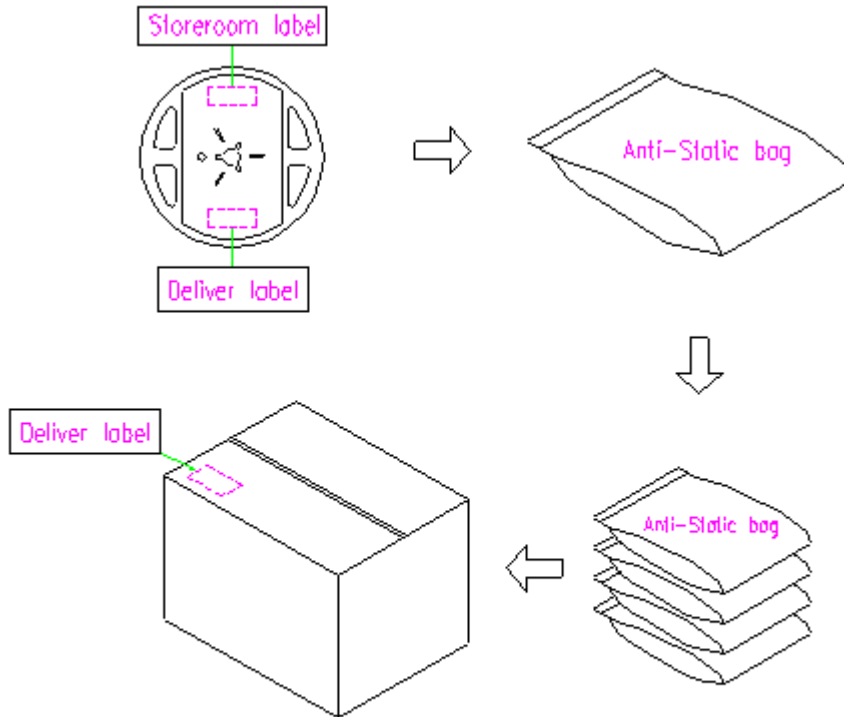
	A	B	C	D	E	F	H	G	T2	T1	T3
Dimensions	180	60	13.0	2.0	9.1	2.9	3.9	4.9	11.4	9.0	1.2
Tolerance	±1.0	±1.0	±0.2	±0.5	±0.5	±0.5	±0.5	±0.5	±1.0	±0.3	±0.1

**2. Tape Dimension**

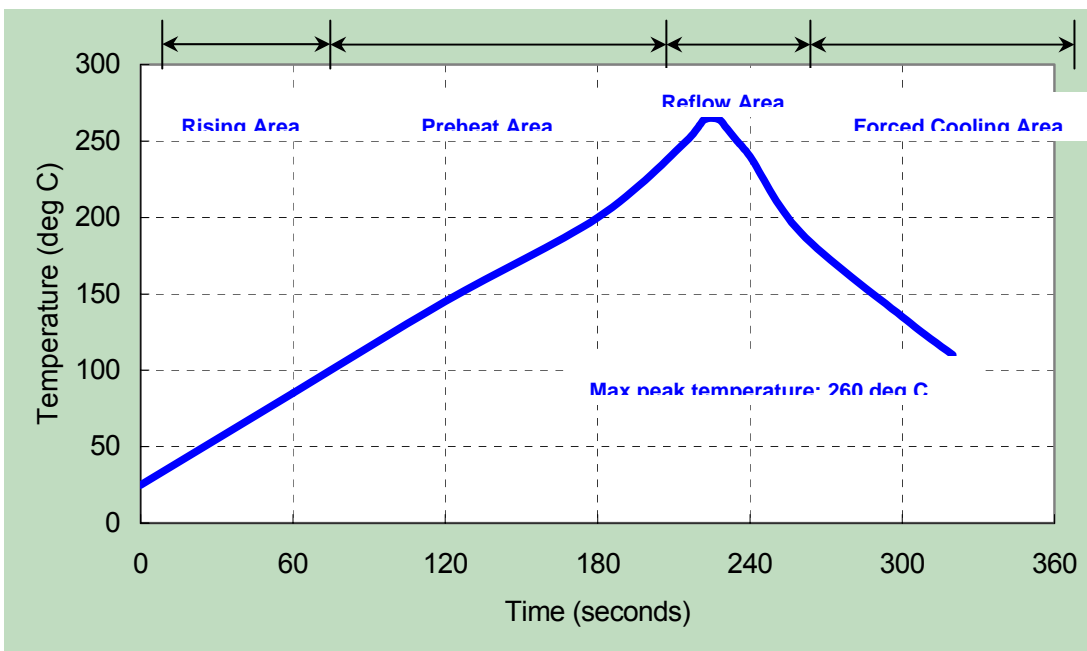


Unit: mm	A0	B0	W	F	E	P0	P1	P2	D1	D	K0	t
Dimension	2.80	3.71	8.00	3.5	1.75	4.00	4.00	2	1.50	1.0	1.75	0.25
Tolerance	±0.1	±0.1	+0.3/-0.1	±0.05	±0.1	±0.1	±0.1	±0.05	+0.1/-0.00	+0.25/-0.00	±0.1	±0.02

## Packing Quantity/Packing:



## Reflow Profile:



## Notes of the Usage:

1. Touch the solder iron at  $260 \pm 5$  deg C onto the leads for  $10 \pm 2$  sec max or touch the solder at  $350 \pm 5$  deg C onto the leads for  $3 \pm 0.5$  sec.
2. In the customer's reflow process, if it will remain some mechanical stress at the soldering terminals, also make some cracks on the soldering termination. Some cracks will cause open or short circuit and cause of thermal increasing or smoking. Don't make any excess mechanical stress to soldering points.
3. In case of giving a heavy shock to the products, it may make an open or short circuit and cause of thermal increasing and smoking. To avoid heavy shock impact applying to products is strictly required.

## Notes of the Storage:

1. To keep products under the condition at the room temperature ( $-5 \sim 35$  deg C) with normal humidity (45~75%). Absorption of moisture and dewdrop may make inferiority of characteristics and a short circuit.
2. Oxidization of terminals shall make the solderability more inferior. Dusts and corrosive gas will make a cause of the open or short circuit. Keep it in the clean place where is not in dusty and no corrosive gas.
3. Use the anti-static material to the storage package.
4. Don't put any excess weight to the TCXO in the storage process.
5. Don't move the product from the cold place to the hot place in the short time, otherwise it may make some dew-drop, then a short circuit may happen in case.
6. Storage periods should be maximum 6 months under condition of above item 1 after delivery from TST factory.
7. Once open the bag, there is possibility of electrical characteristics deterioration due to absorption of moisture. So, please use parts within 7 days after opening the bag.
8. If you have to keep parts without using after opening the bag, please put the drying agent in the bag, fold the bag and keep it in the place where temperature and humidity are controlled (nitrogen atmosphere box etc.)