

Общество с ограниченной ответственностью  
«Научно-производственное предприятие «Техно-ПАРК»  
(ООО «НПП «Техно-ПАРК»)

Тел/факс (495) 411-96-09

Юридический и фактический адрес: 121357, г. Москва, ул. Верейская, д. 29, стр. 135.

Почтовый адрес для переписки: 121357 Москва, а/я 61.

E-mail: [mail@sawtechno.ru](mailto:mail@sawtechno.ru)

Web: [www.sawtechno.ru](http://www.sawtechno.ru)

## Технические характеристики генератора, управляемого напряжением

### ТХ0444А

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Производитель: TAI-SAW TECHNOLOGY CO., LTD

Поставщик: ООО «НПП «Техно-ПАРК» - авторизованный дистрибьютор компании  
TAI-SAW TECHNOLOGY CO., LTD

Научно-производственное предприятие ООО «НПП «Техно-ПАРК» разрабатывает и поставляет полосно-пропускающие радиочастотные фильтры на поверхностных акустических волнах (ПАВ) и устройства на их основе. «НПП «Техно-ПАРК» имеет собственную научную и производственную базу, а также является авторизованным дистрибьютором мирового лидера по производству фильтров на ПАВ компании TAI-SAW TECHNOLOGY CO., LTD

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E-mail: [mail@sawtechno.ru](mailto:mail@sawtechno.ru) Web: [www.sawtechno.ru](http://www.sawtechno.ru)



# 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 Description: VCXO SMD 7.0x5.0 122.88MHz

TST Part No.: TX0444A

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

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

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

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

Date: \_\_\_\_\_ 10/19/2011

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.**  
**SMD 7.0x5.0 122.88MHz VCXO**

MODEL NO.: TX0444A

REV. NO.: 1.0

**Revise:**

Rev.	Rev. Page	Rev. Account	Date	Ref. No.	Reviser
1.0	N/A	Initial release	10/19/11'	N/A	Ginger Huang



# TAI-SAW TECHNOLOGY CO., LTD.

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

## 7.0x5.0 VCXO 122.88 MHz

MODEL NO.: TX0444A

REV. NO.:1.0

### Features:

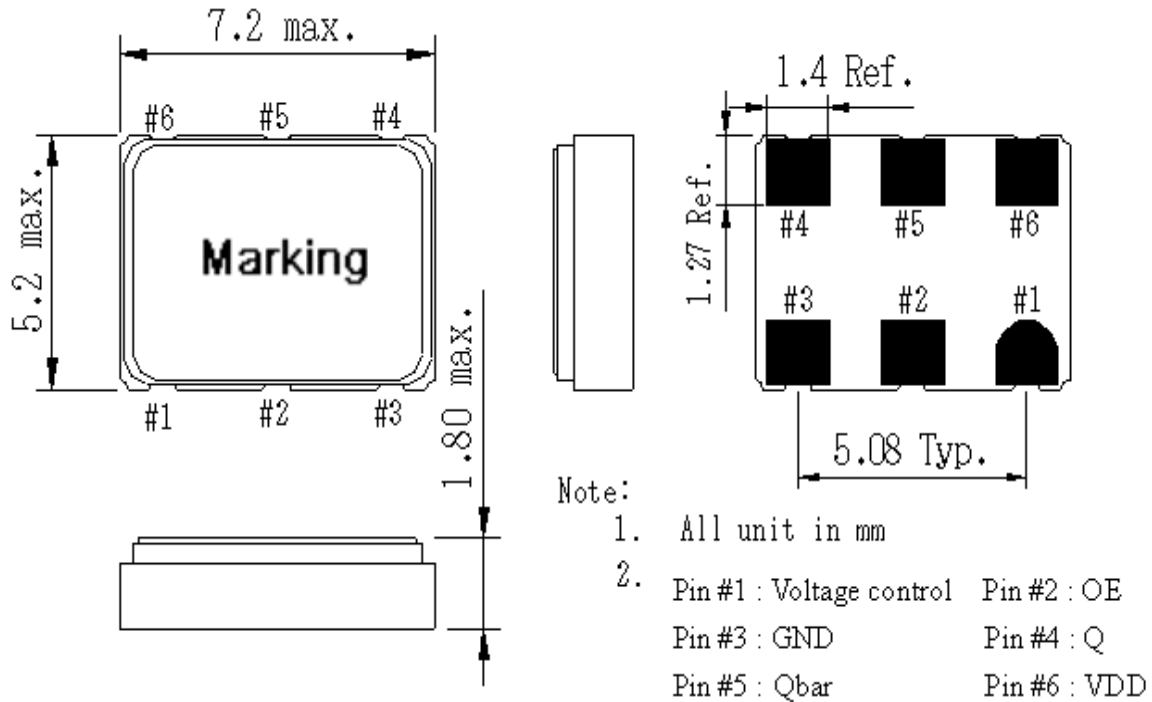
1. 3.3V Operation / Complementary PECL Output
2. Enable / Disable Function (6-Pad)
3. Main application: WLAN, SONET/SDH/DWDM, Gigabite Ethernet, Storage Area Network, Digital Video
4. Surface mount 5.0mmx7.0mm crystal oscillator

### Electrical Specifications:

Characteristics	Units	Minimum	Typical	Maximum
Center Frequency	<b>MHz</b>		122.88	
Storage Temperature Range	<b>°C</b>	-55		125
Operating Temperature Range	<b>°C</b>	-40		85
* Absolute Pulling Range (APR)	<b>ppm</b>	+/-50	-	-
Input Voltage (Operating Vdd)	<b>VDC</b>	-	3.3+/-10%	-
Control Voltage (Vt)	<b>VDC</b>	0	1.65	3.3
Current Consumption	<b>mA</b>	-	-	80
<b>Output</b>				
Load	<b>ohm</b>	-	50	-
“0” Level ( Output Logic Low)	<b>VDC</b>	Vdd-1.81	-	Vdd-1.62
“1” Level ( Output Logic High)	<b>VDC</b>	Vdd-1.025	-	Vdd-0.88
Duty Cycle	<b>%</b>	45%	-	55%
Rise Time (20%->80% VDD)	<b>nSec</b>	-	-	1.0
Fall Time (80%->20% VDD)	<b>nSec</b>	-	-	1.0
Start-up Time	<b>ms</b>	-	-	10
Enable Voltage High(Logic 1)	<b>V</b>	0.7VDD	-	-
Enable Voltage Low(Logic 0)	<b>V</b>	-	-	0.3VDD
Phase Jitter (Integrated 12K~20MHz)	<b>ps</b>	-	-	1.0
Linearity	<b>%</b>	-	-	10
Enable/Disable Function		PIN#2: High or Open , PIN#4, #5: Enable PIN#2: Low , PIN#4, #5: Disable		
Package size		SMD7.0x5.0x1.8mm		

- Note1 : APR=Pull Range-(frequency tolerance at 25°C ,variation over temperature, supply voltage and aging)

## Mechanical Dimensions (mm):



Marking: NO Marking

### Product Code Table

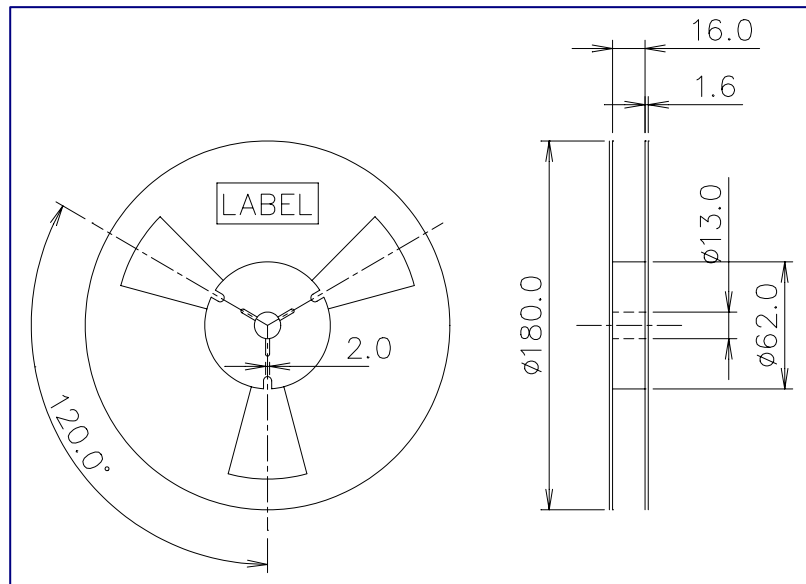
Year	2009	2010	2011	2012
	2013	2014	2015	2016
	2017	2018	2019	2020
Product Code	<b>W</b>	<b>w</b>	<b><u>W</u></b>	<b><u>w</u></b>

### Date Code Table

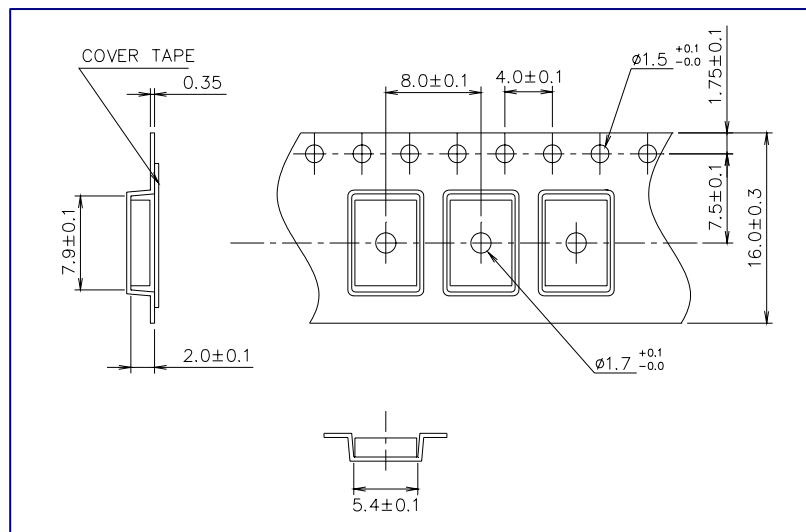
<b>WK01</b>	<b>WK02</b>	<b>WK03</b>	<b>WK04</b>	<b>WK05</b>	<b>WK06</b>	<b>WK07</b>	<b>WK08</b>	<b>WK09</b>	<b>WK10</b>	<b>WK11</b>	<b>WK12</b>	<b>WK13</b>
A	B	C	D	E	F	G	H	I	J	K	L	M
<b>WK14</b>	<b>WK15</b>	<b>WK16</b>	<b>WK17</b>	<b>WK18</b>	<b>WK19</b>	<b>WK20</b>	<b>WK21</b>	<b>WK22</b>	<b>WK23</b>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

## Tape & Reel:

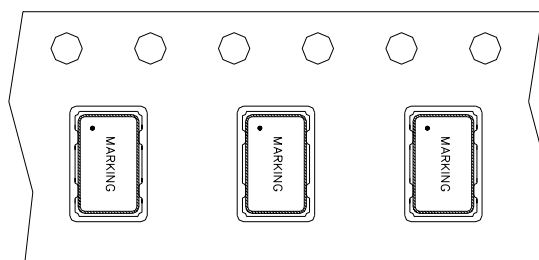
- Packing Quantity: 1k /Reel
- Reel dimension (unit: mm)



- Tape dimension (unit: mm)

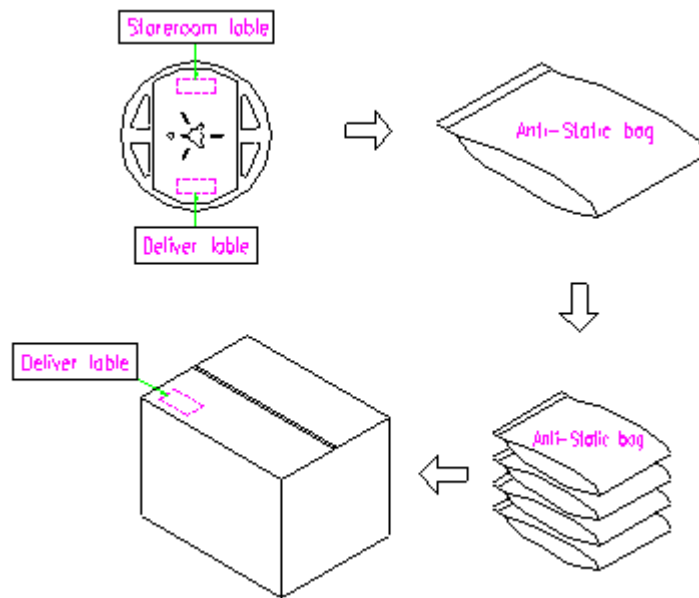


- Packing direction

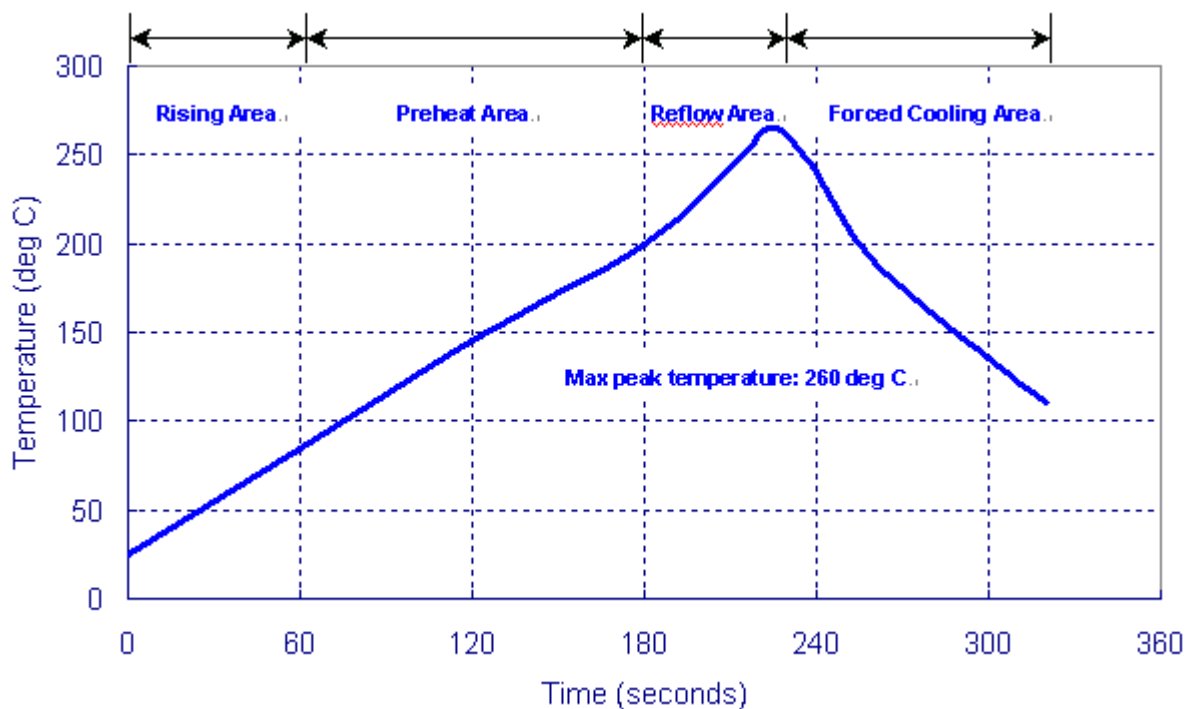


# Packing Quantity/Packing:

1K pcs maximum per reel



# Reflow Profile:



**Note:** 1. Max peak temperature: 260 +/- 5 deg C; Time: 10 +/- 2 sec  
2. Temperature: 217 +/- 5 deg C; Time: 90~100 sec

# Reliability Specifications

Test name	Test process / method	Reference standard
<b>Mechanical characteristics</b>		
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 : 1.5mm Vibration frequency : 10 to 55 Hz Sweep period : 1.0 minute Vibration directions : 3 mutually perpendicular Duration : 2 hr / direc.	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
<b>Environmental characteristics</b>		
Thermal Shock	Heat cycle conditions -55 °C (30min) ↔ 125 °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