



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 Web: www.taisaw.com

Approval Sheet For Product Specification

Issued Date: 05/26/2009 (REV. NO.:7.0)

Product Name: SMD 5x3.2 24.5535MHz TCXO

TST Parts No.: TX0146A

Customer Parts No. : _____

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

Checked by: _____ Quinton Lo *Quinton Lo*

Approval by: _____ Robert Chang *Robert Chang*

Date: _____ 05/26/2009



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 Web: www.taisaw.com

SMD 5.0x3.2 24.5535MHz TCXO

MODEL NO.: TX0146A

REV. NO.:7.0

Features:

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

RoHS Compliant
Lead free
Lead-free soldering

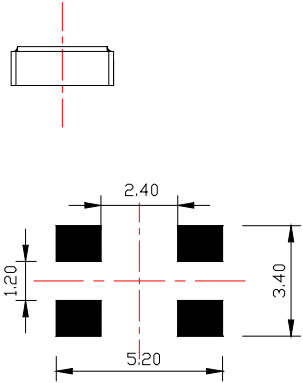
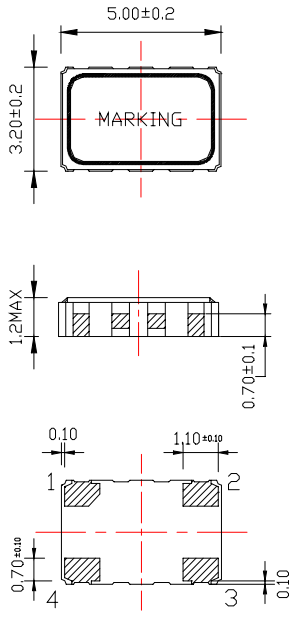
Description and Applications:

Surface mount 5.0mmx3.2mm TCXO for use in GPS system

Electrical Specifications:

TX0146A	Specifications
Nominal Frequency, Fo	24.553500 MHz
Storage Temperature Range	-40°C to +85°C
Operating Temperature Range	-40°C to +85°C
Power Supply Voltage, Vdd	3 V
Output Waveform	Clipped Sinewave
Output Voltage with Load 10pF//10KΩ, Vout	0.8 Vp-p min
Power Supply Current, Icc	2.0 mA max
Frequency Tolerance after Two Reflows	+/- 2.0 ppm max @ 25°C +/- 3°C
Frequency Stability	
a. Vs. Temperature (-40~85°C)	+/- 2.5 ppm
b. Vs. Load varied 10pF//10KΩ+/-10%	+/- 0.2 ppm
c. Vs. Supply Voltage varied 3V+/-5%	+/- 0.2 ppm
Start Up Time (90% of final RF level in Vp-p)	3.0 msec max.
Aging	+/-1.0 ppm/year @25°C
Harmonics	-7.0 dBc max
SSB Phase Noise (@1KHz Carrier Offset)	-130 dBc/Hz max

Mechanical Dimensions (mm):



Recommended Soldering Pattern

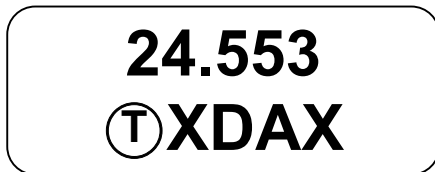
UNIT: mm

PIN	FUNCTION
1	VCON: VCTCXO GND: TCXO Tri-state:XO
2	GND
3	OUT
4	VDD

Marking:

Line 1: Frequency

Line 2: TST Logo + Product code + Date Code + Traceability Code (AX)



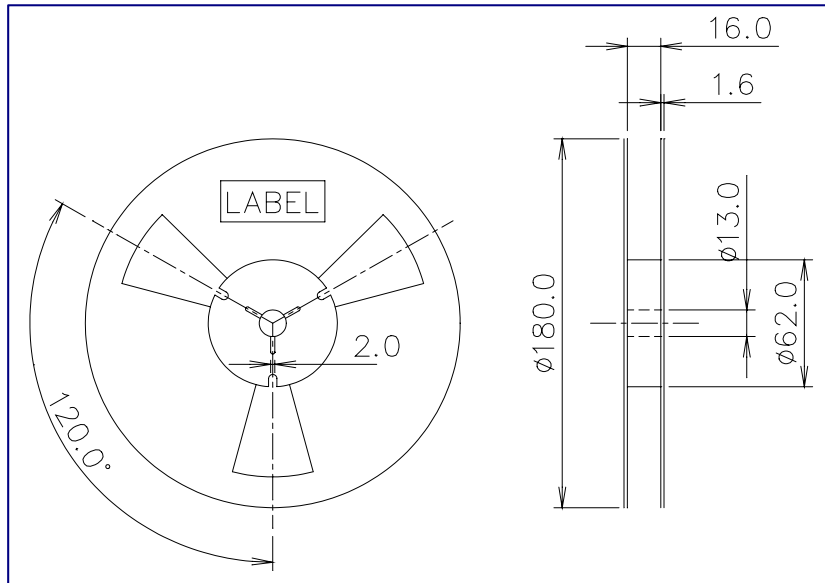
Product Code Table

Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	X	x	X	x

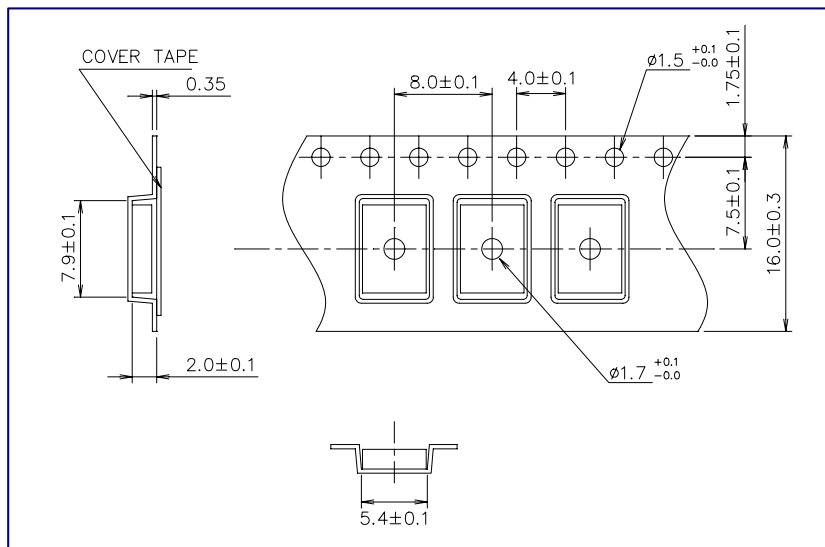
Date Code Table

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

1. Reel Dimension



2. Tape Dimension



[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.

Reflow Profile:

