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

Product Specifications Approval Sheet

Product Description: VCXO SMD 7.0x5.0 36MHz

TST Part No.: TX0215A

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Ginger Huang

Approved by:_____ Kelly Huang

Date:_____ 08/08/2012

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.

Revise:

Rev.	Rev. Page	Rev. Account	Date	Ref. No.	Reviser
1	N/A	Initial release	01/05/07’	N/A	Ryan Huang
2	P4	Change Mechanical Dimensions	08/08/12’	1.0	Ginger Huang

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

7.0x5.0 VCXO 36MHz

MODEL NO.: TX0215A REV. NO.:2.0

Features:

RoHS Compliant
Lead free
Lead-free soldering

1. 3.3V Operation / Complementary HCMOS Output
2. Enable / Disable Tristate Function (6-Pad)
3. Main application: WLAN, SONET/SDH/DWDM, Gigabite Ethernet, Storage Area Network, Digital Video

Electrical Specifications:

Measurement shall be made under room temperature and humidity at below conditions.

Temperature: 25+/-3 ℃

Humidity: Below 70% RH

Operating Temperature: -40 ℃ to +85 ℃

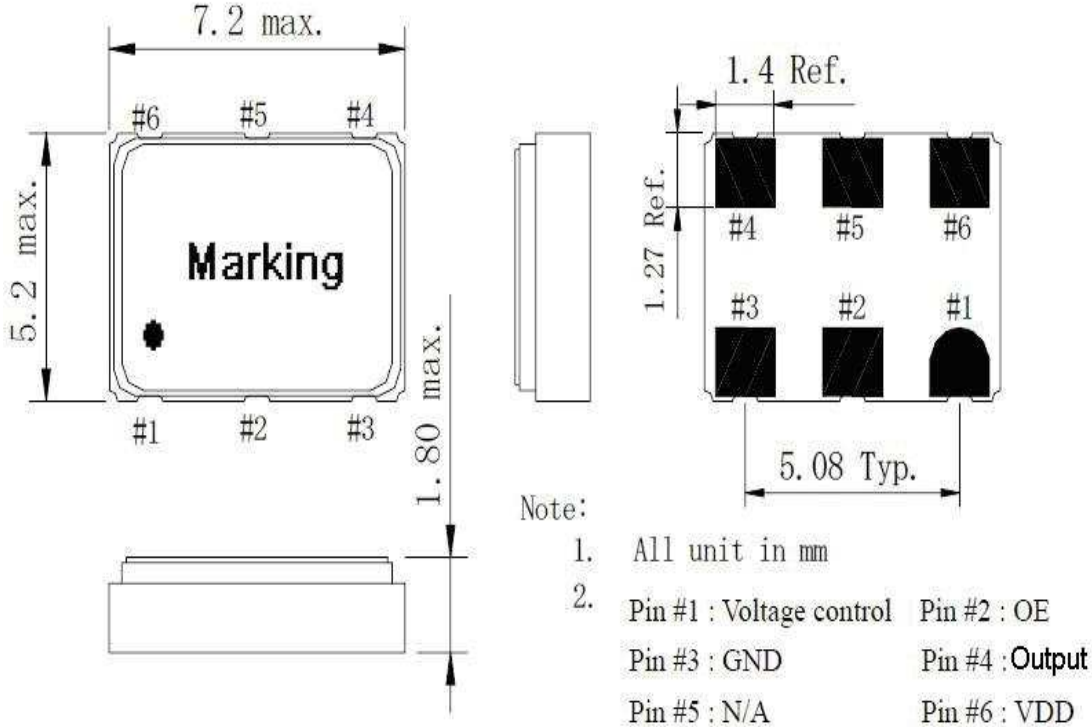
Storage Temperature: -40 ℃ to +85 ℃

Characteristics	Units	Minimum	Typical	Maximum
Center Frequency	**MHz**	-	36	-
Frequency Stability	**ppm**	-50	-	50
Input Voltage (Operating Vdd)	**VDC**	-	3.3+/-5%	-
Control Voltage (Vt)	**VDC**	0.15	1.65	3.15
Current Consumption	**mA**	-	-	20
Frequency Pullability	**ppm**	+/-100	-	-
Linearity	**%**	-	10%	-
Output				
Load	**ohm**	-	15	-
“0” Level (Vol)	**VDC**	-	-	0.33
“1” Level (Voh)	**VDC**	2.97	-	-
Duty Cycle	**%**	45%	-	55%
Rise Time (10%->90% VDD)	**nSec**	-	-	6
Fall Time (90%->10% VDD)	**nSec**	-	-	6
Enable/Disable Function		PIN#2: High or Open , PIN#4: Enable PIN#2: Low , PIN#4: Disable		
Package size		SMD7.0x5.0x1.8mm		

Parameter denoted with an asterisk (*)

Note1: Frequency stability includes 25C tolerance, operating temperature range , aging and input voltage or load change

Mechanical Dimensions (mm):



Marking:

Line 1 : Frequency (36.000)

Line 2 :ⓉXDA (TST logo + Product Code + Data Code + TST Internal Code)

36.000
ⓉXDA

Product Code Table

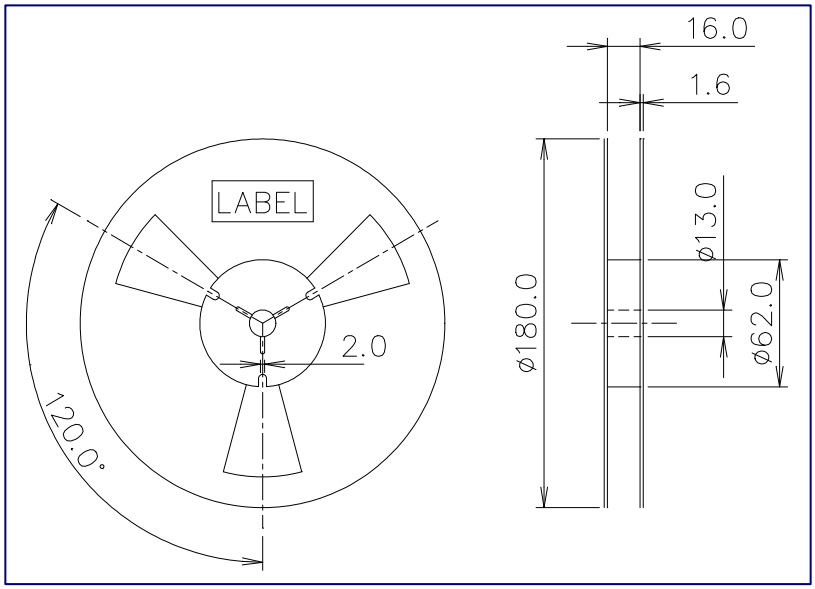
Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	X	x	X	x

Date Code Table

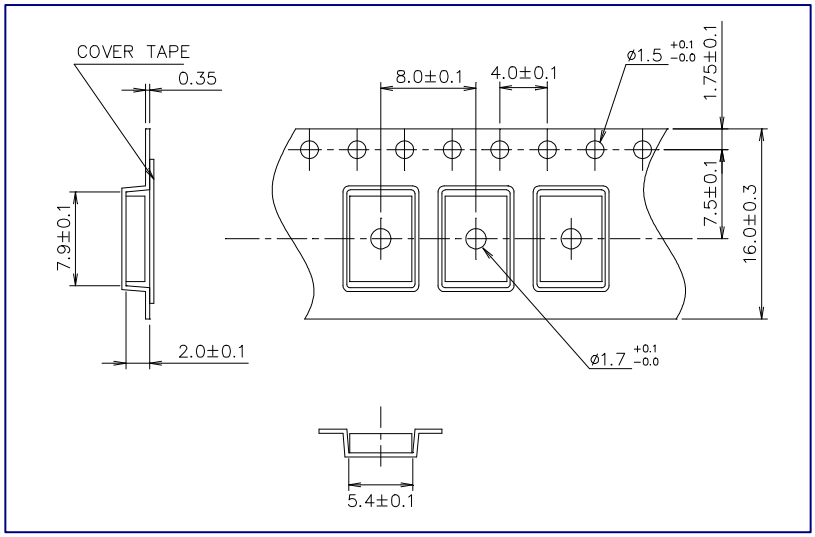
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

Tape & Reel:

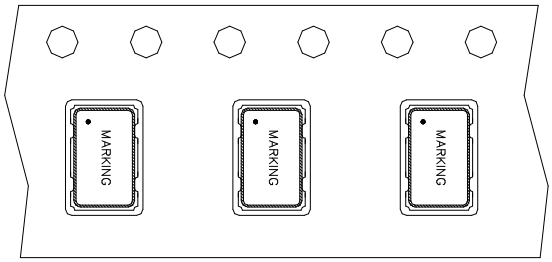
- Reel dimension (unit: mm)



- Tape dimension (unit: mm)

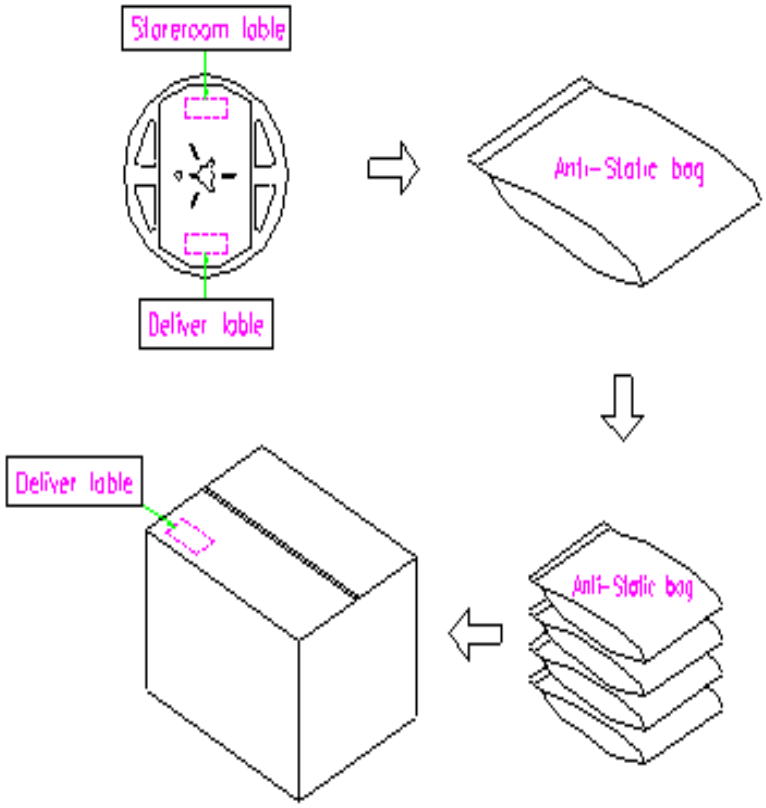


- Packing direction

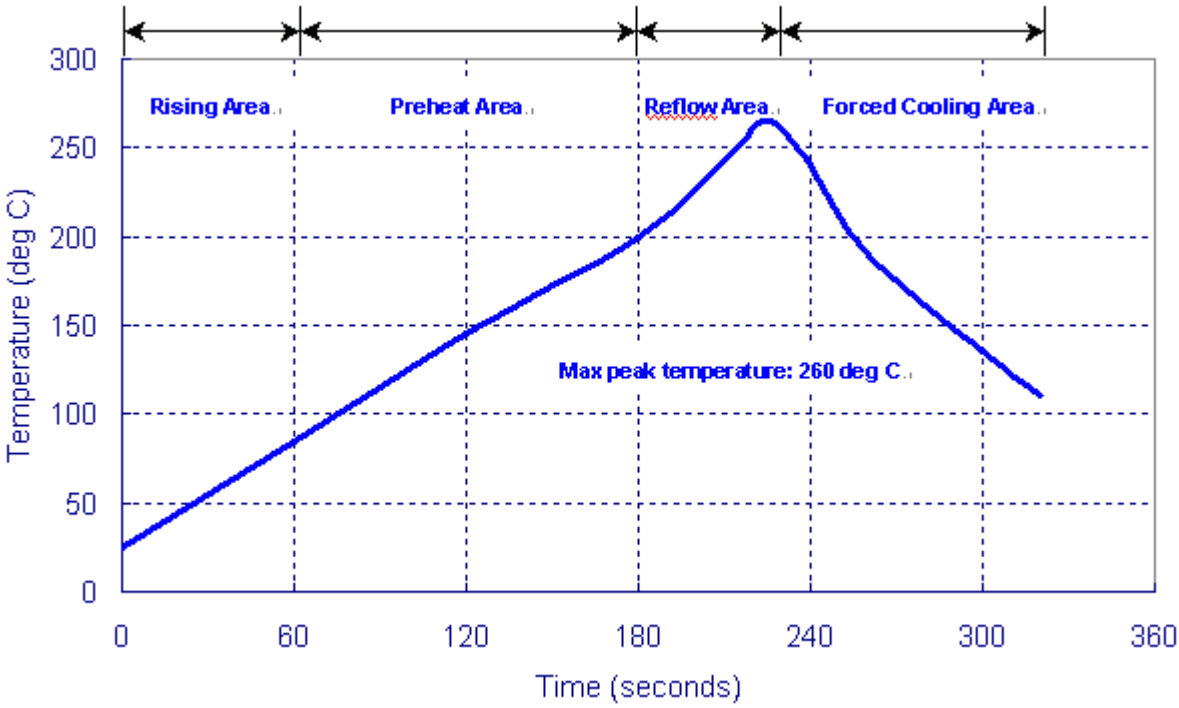


Packing Quantity/Packing:

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
Mechanical characteristics		
resistance to Soldering heat (IR reflow)	Temp./ Duration : 260℃ /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℃ Duration time: 5±0.5 seconds.	MIL-STD 883G method 2003
Environmental characteristics		
Thermal Shock	Heat cycle conditions -55 ℃ (30min) ⟷ 125 ℃ (30min) * cycle time : 10 times	MIL-STD 883G method 1010.7
Humidity test	Temperature : 70 ± 2 ℃ Relative humidity : 90~95% Duration : 96 hours	MIL-STD 202F method 103B
Dry heat (Aging test)	Temperature : 125 ± 2 ℃ Duration : 168 hours	MIL-STD 883G method 1008.2 condition C
PCT test	Pressure: 2.06kg/cm^2 (2.03*10^5 pa) Temperature : 121 ± 2 ℃ Relative humidity : 100% Duration : 24 hours	EIAJED-4701-3 B-123A