



TAI-SAW TECHNOLOGY CO., LTD.

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

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Product Specifications Approval Sheet

Product Description: Crystal Oscillator SMD 2.5x2.0 3.5795MHz

TST Part No.: TW0464A

Customer Part No.: _____

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

Checked by: _____ Ginger Huang *Ginger Huang*

Approved by: _____ Kelly Huang *Kelly Huang*

Date: _____ 11/05/2013

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.



TAI-SAW TECHNOLOGY CO., LTD.
SMD 2.5x2.0 3.5795MHz Crystal Oscillator

MODEL NO.: TW0464A

REV. NO.: 1.0

Revise:

Rev.	Rev. Page	Rev. Account	Date	Ref. No.	Reviser
1	N/A	Initial release	11/05/13'	N/A	Ginger Huang



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SMD 2.5x2.0 3.5795MHz Crystal Oscillator

MODEL NO.: TW0464A

REV. NO: 1.0

Features:

- Surface Mount Seam Weld Package
- Excellent Reliability Performance
- Good Frequency Perturbation and Stability over temperature

RoHS Compliant
Lead free
Lead-free soldering

Application:

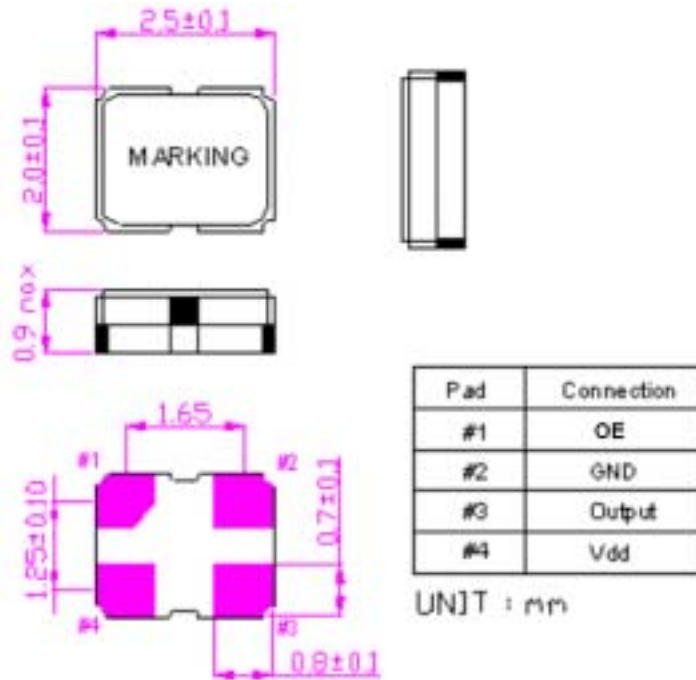
- 3.3 V Supply Voltage CMOS Output
- Option-able stand-by function for output .

Electrical Characteristics:

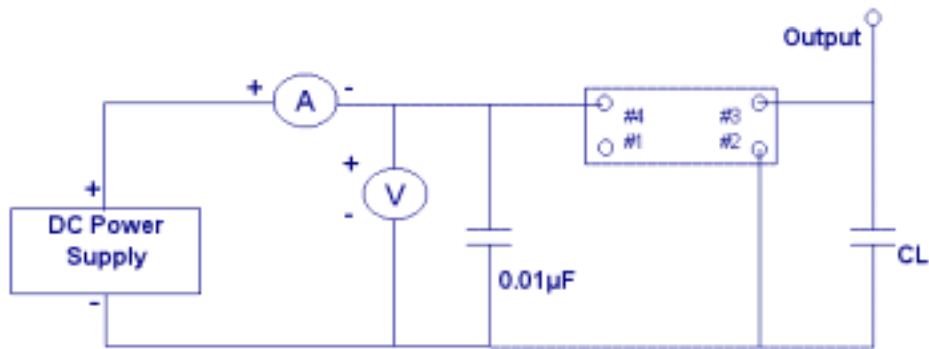
TW0464A	Specifications
Nominal Frequency, Fo	3.579500 MHz
Storage Temperature Range	-40°C to +90°C
Operating Temperature Range	-20°C to +70°C
Power Supply Voltage, Vcc	3.3V +/- 5%
Load	15pF
“0” Level “1” Level	0.33 V max 2.97 V min
Power Supply Current, Icc	4 mA max
Frequency Accuracy ¹	+/-30ppm max
Duty Cycle	45% ~ 55%
Rise Time (10% -> 90% of final RF level in Vp-p) Fall Time (90% -> 10% of final RF level in Vp-p)	10 nsec max. 10 nsec max
Enable/Disable Function	PIN 1: High or Open, PIN 3:Enable PIN 1: Low, PIN 3:Disable

#Note 1: Frequency accuracy includes 25 tolerance, operating temperature range -20 to 70 , aging and voltage or load change

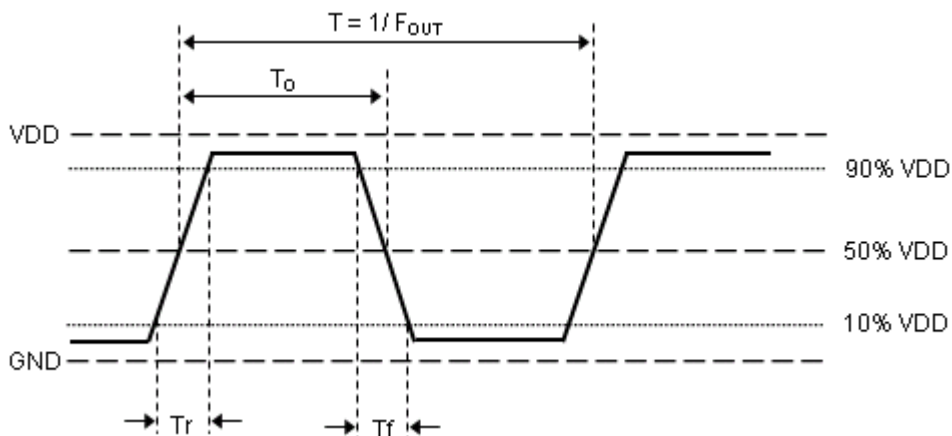
Mechanical Dimensions: (Unit: mm)



Test Circuit:



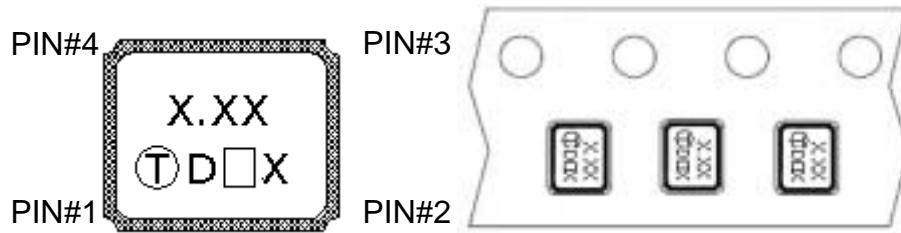
Output Waveform :



Marking:

Line 1: Frequency (3.57)

Line 2: TST Logo + Date Code + Product Code (X is TST internal tracking code, could be a~z and A~Z, : Can Track Year , (Under line With Even Year and Odd Year for Nothing)



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

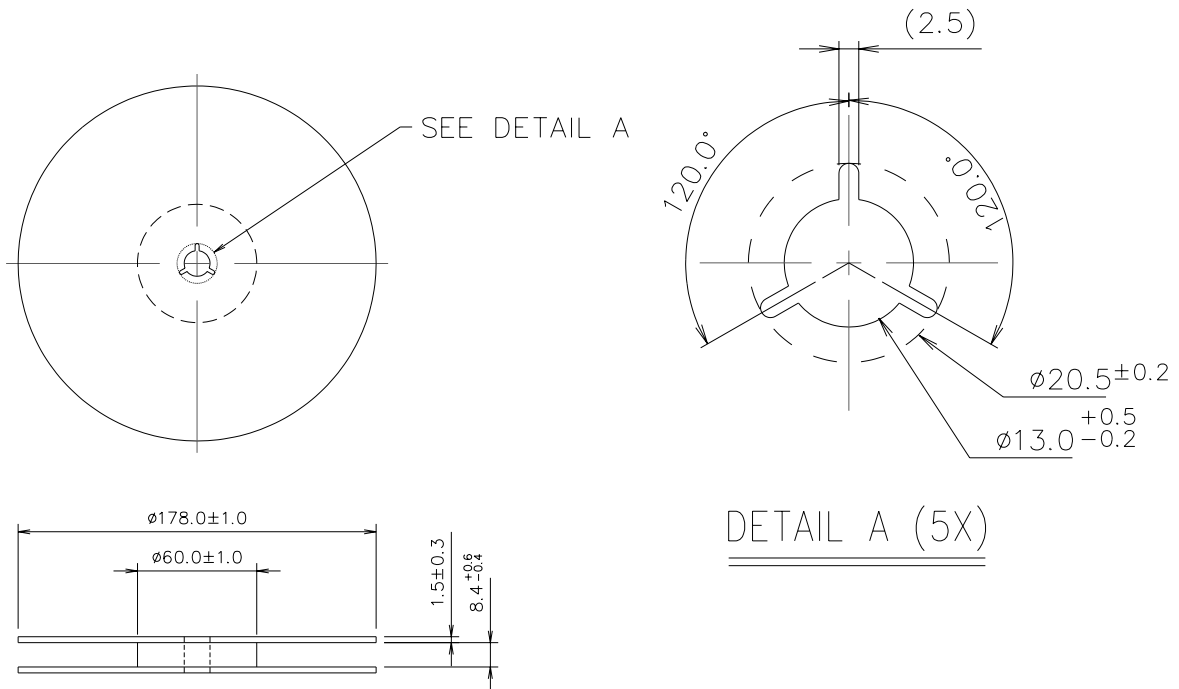
Date Code Table

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

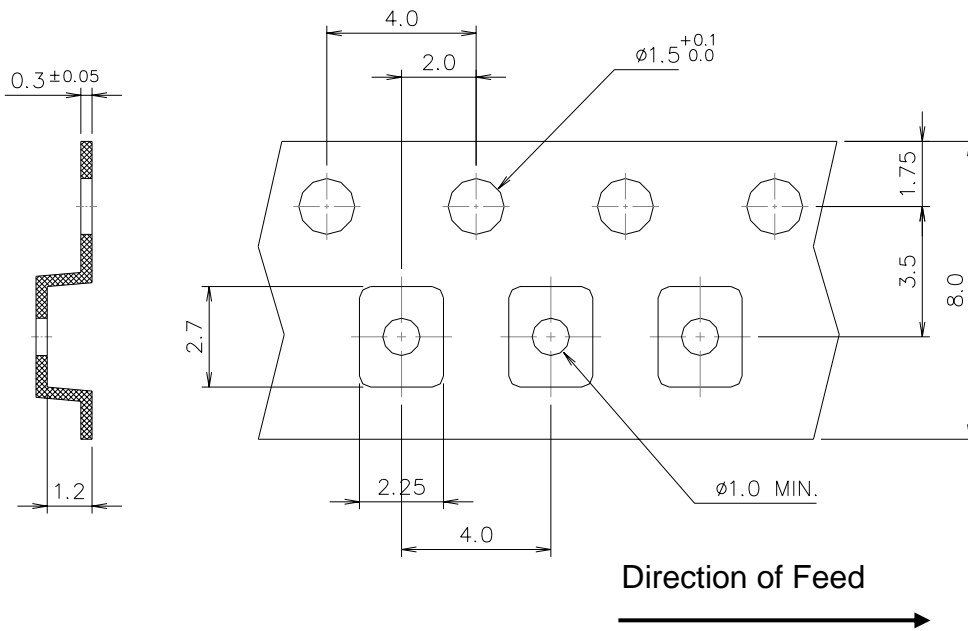
Product Code Table: (Under line With Even Year and Odd Year for Nothing)

Year						Product Code
2013	2015	2017	2019	2021	2023	<input type="checkbox"/>
2014	2016	2018	2020	2022	2024	<input type="checkbox"/>

Reel Dimensions (mm):



Tape Dimensions (mm):

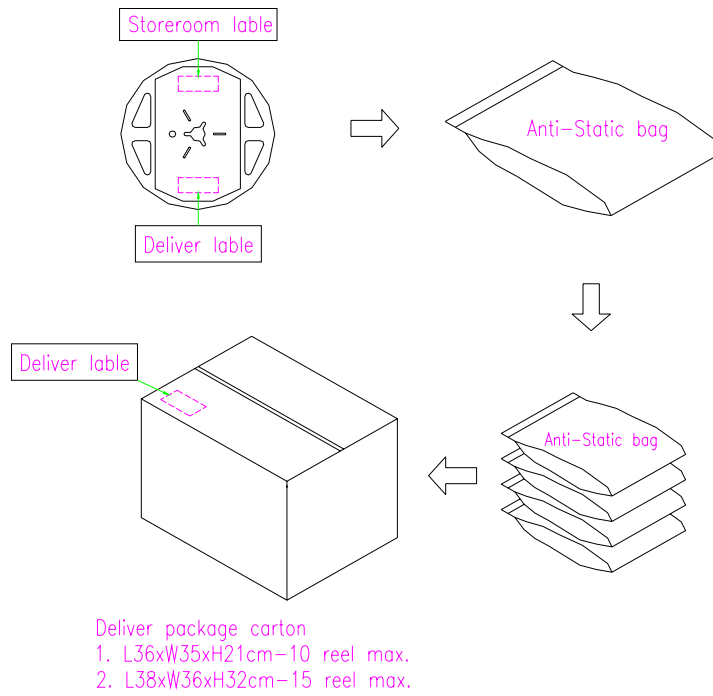


[NOTE]:

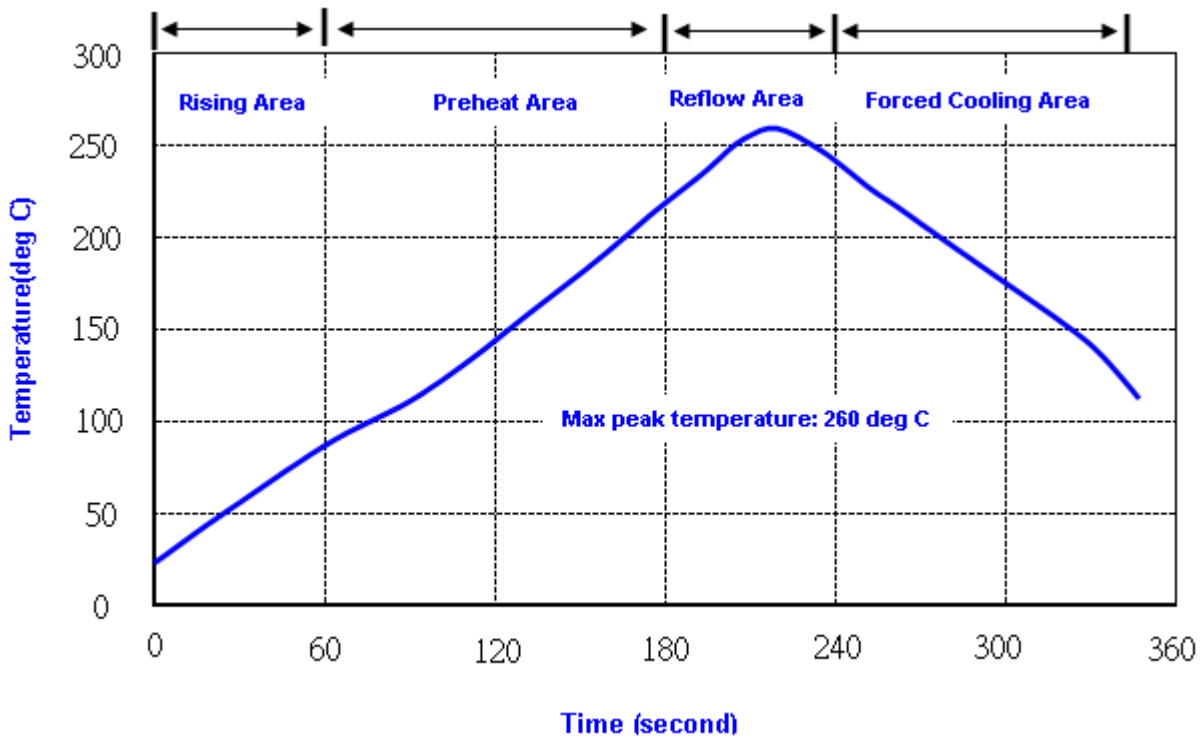
1. Unless otherwise specified tolerance on dimension ± 0.1 mm.
2. Material: conductive polystyrene with color black.
3. 10 pitch cumulative tolerance ± 0.2 mm.

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

