



# 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: VCO SMD 8.2mmx6.0mm

TST Part No.: TV0134A

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

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

Checked by: Rodic Chen 

Approved by: Robert Chang 

Date: 2009.08.05

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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## SMD 8.2x6.0 VCO

MODEL NO.: TV0134A

REV. NO.:1.0

### Description and Applications:

- Voltage Control Oscillator, SMD type, 8.2mmx6.0mm.



### Conditions:

Parameter	Symbol	Limits			Units
		min.	typ.	max.	
Supply Voltage	V <sub>cc</sub>	2.6	2.8	3.0	V
Control Voltage Range	V <sub>t</sub>	0.5	-	2.5	V
Load Impedance	-	-	50	-	Ohm
Temperature Range	-	-30	25	85	°C

### Electrical Specifications:

For different applications, the specification change is possible. Please contact TST sales representative or application engineer for your requirement.

Parameter		Condition	Limits			Units
			min.	typ.	max.	
Power Consumption	23±3	-	-	-	10	mA
Operation Frequency Range	23±3	-	983	-	1083	MHz
Operation Frequency Range	23+3	V <sub>cc</sub> =2.8V V <sub>t</sub> =1.5V	1028		1038	MHz
Control Voltage Sensitivity	23±3	-	65	75	90	MHz/V
Output Level	23±3	-	-16	-13	-10	dBm
C/N	23±3	100 KHz offset	105	-	-	dBc/Hz
Pushing Figure	23±3	V <sub>cc</sub> =2.8+0.2V, ref V <sub>cc</sub> =2.8V	-1.0	-	+1.0	MHz
Pulling Figure	23±3	VSWR=2.0 for all phase, ref:50Ohm	-1.0	-	+1.0	MHz
Harmonics (2fo, 3fo)	23±3		-	-	-20	dBc
Harmonics (11fo)	23±3				-75	dBc
Temperature Stability	23±3	-30~+85 deg.C Ref. 25 deg.C	-5.0	-	+5.0	MHz

## Mechanical Dimensions (mm):

A=8.2

B=6.0

C=1.6

D=6.4

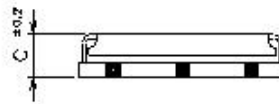
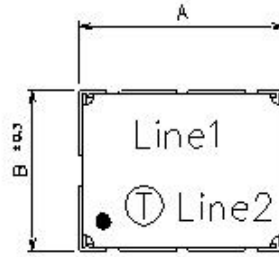
E=4.2

F=2.4

G=5.5

H=1.1

I=1.5



Pin #1= RF OUT

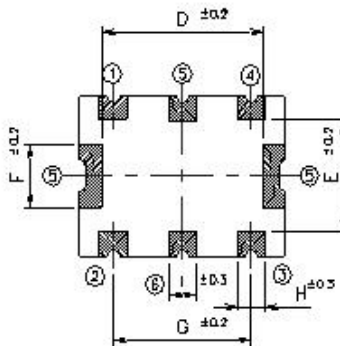
Pin #2= Vcc

Pin #3= Vcont (Vt)

Pin #4= GND

Pin #5= GND

Pin #6= GND



## Marking:

Line 1= 0134 (TST P/N)

Line 2= TST Logo + VCO Product Code + Date Code

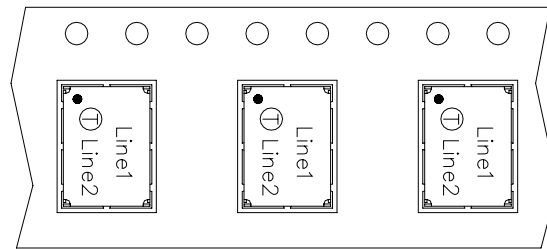
## Product Code Table:

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

## 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

## Part Orientation:



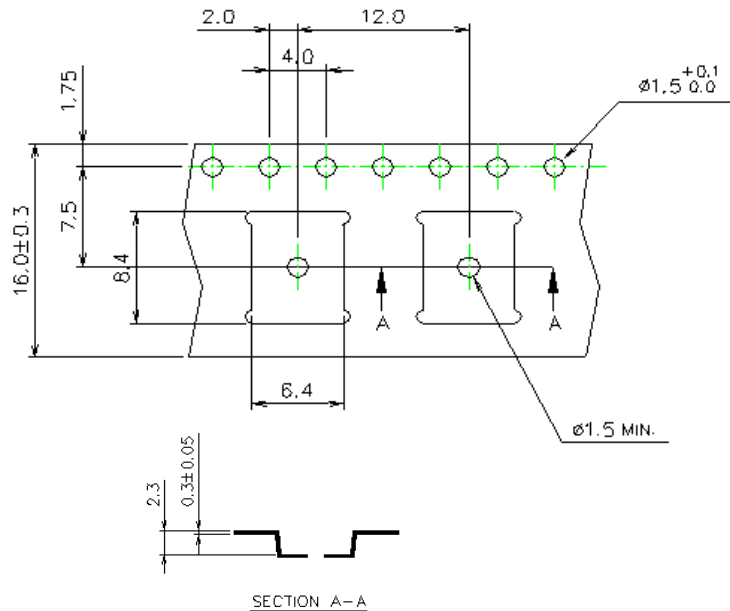
### 8.2x6.0mm Package Carrier Tape

Tape Width:	16 mm
Tape Pitch (part to part):	12 mm
Reel Diameter:	320.2mm (13 inch)
Quantity per reel:	2000

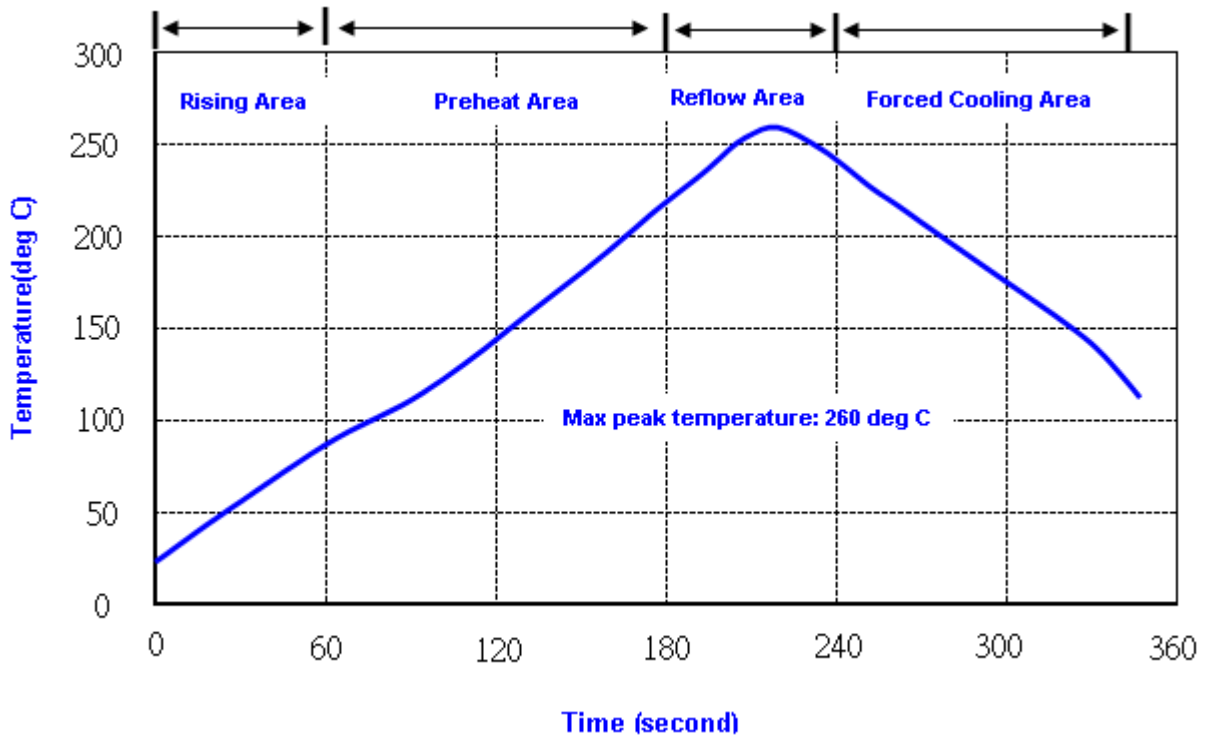
### [NOTES]

1. UNIT : MM.
2. UNLESS OTHERWISE SPECIFIED TOLERANCE ON DIM. +/-0.1MM.
3. MATERIAL: CONDUCTIVE POLYSTYRENE.
4. COLOR: BLACK.
5. 10 PITCH CUMULATIVE TOLERANCE +/-0.2MM.

## Tape & Reel:



## Reflow Profile:



Note: 1. Max peak temperature: 260 $\pm$ 5 deg C; Time: 10 $\pm$ 2 sec

2. Temperature: 217 $\pm$ 5 deg C; Time: 90~100 sec