



TAI-SAW TECHNOLOGY CO., LTD.

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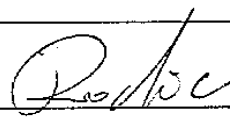
Product Specifications Approval Sheet

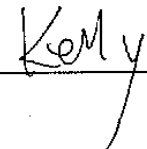
Product Description: VCO SMD 5.5mmx4.8mm 370MHz

TST Parts No.: TV0142A

Customer Parts No. : _____

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

Checked by: _____ Rodic Chen 

Approved by: _____ Kelly Huang 

Date: _____ 03/10/2010

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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Part No. TV0142A

REV. NO.:1.0

Description and Application:

- Voltage Control Oscillator, SMD type, 5.5mmx4.8mm.
- Main application: Wireless radio

RoHS Compliant

Lead-free soldering

Conditions:

Parameter	Symbol	Limits			Units
		min.	typ.	max.	
Supply Voltage	V _{cc}	4.4	4.5	4.6	V
Control Voltage Range	V _t	0.5	-	4.5	V
Load Impedance	-	-	50	-	Ohm
Operating Temperature	-	-20	25	70	°C

Electrical Specifications:

Parameter	°C	Condition	Limits			Units
			min.	typ.	max.	
Power Consumption	25±3	-	-	11	15	mA
Operation Frequency Range	25±3	-	350	-	390	MHz
Control Voltage Sensitivity	25±3	-	20	-	30	MHz/V
Output Level	25±3	-	-3.0	-	3.0	dBm
Phase Noise (C/N)	25±3	25 kHz offset	-	-	-112	dBc/Hz
		50 kHz offset	-	-	-118	
		100 kHz offset	-	-	-124	
		250 kHz offset	-	-	-132	
		500 kHz offset	-	-	-138	
		5MHz offset	-	-	-153	
		10M offset	-	-	-154	
Pushing Figure	25±3	V _{cc} =4.5±0.1V, ref V _{cc} =4.5V	-0.5	-	+0.5	MHz
Pulling Figure	25±3	VSWR=2.0 for all phase, ref:50Ohm	-1.0	-	+1.0	MHz
Harmonics	25±3	2fo,3fo	-	-	-12	dBc
Non-harmonic spurious	25±3		-	-	-70	dBc

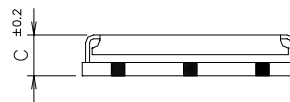
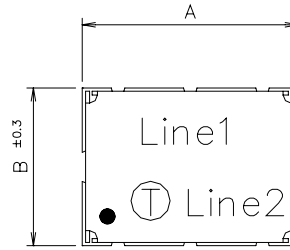
Unless otherwise specified, the standard test conditions are as follow:

Ambient temperature: 25±3 deg.C

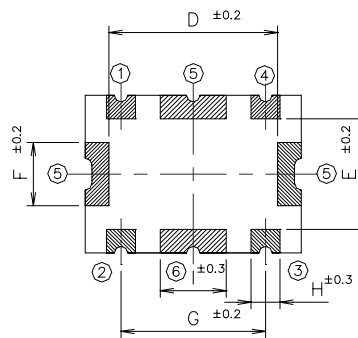
Relative humidity: 40% to 70%

Mechanical Dimensions (mm):

A=5.5
 B=4.8
 C=1.7
 D=4.5
 E=3.4
 F=1.7
 G=3.5
 H=0.7
 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= 0142 (TST P/N)
 Line 2= TST Logo + VCO Product Code + Date Code

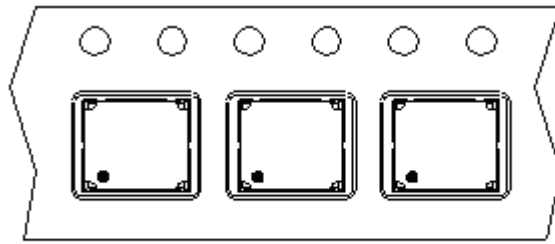
Product Code Table:

Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	V	v	<u>V</u>	<u>v</u>

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:

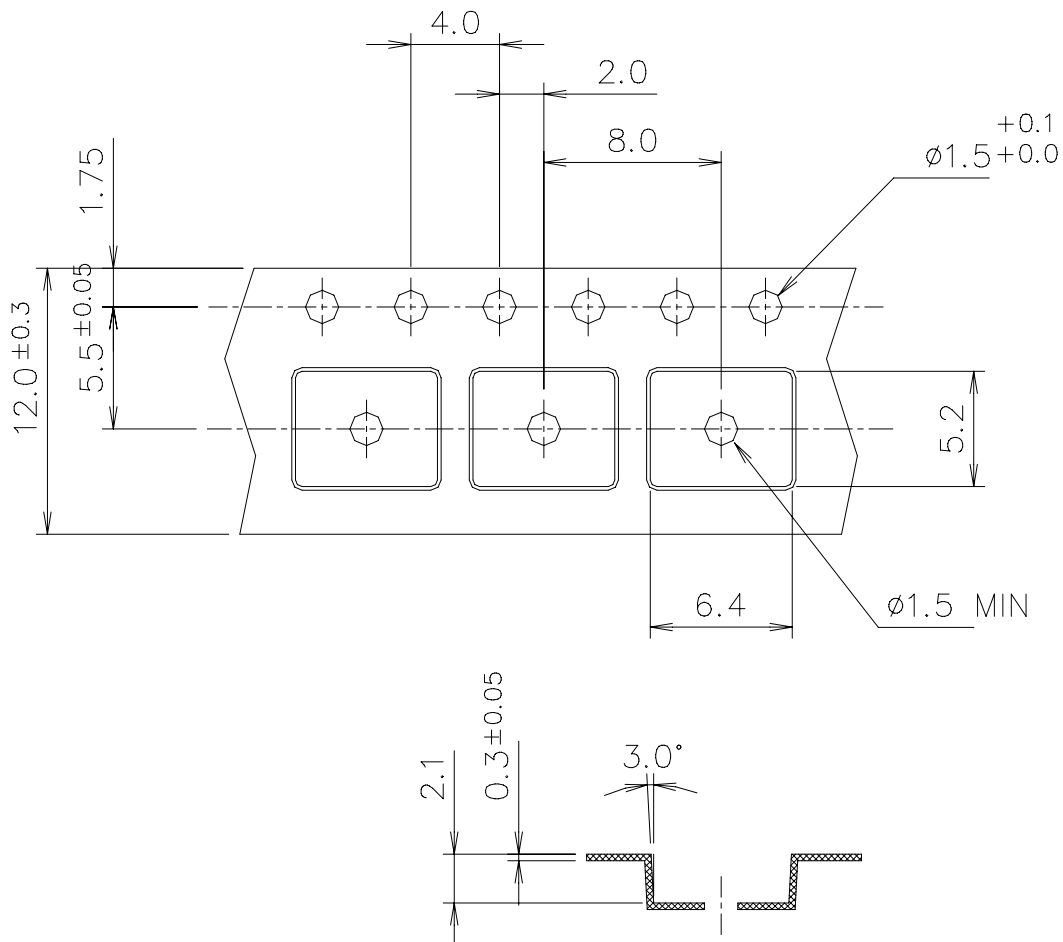


5.5x4.8mm Package Carrier Tape

Tape Width: 12 mm

Tape Pitch (part to part): 8 mm

Tape & Reel:

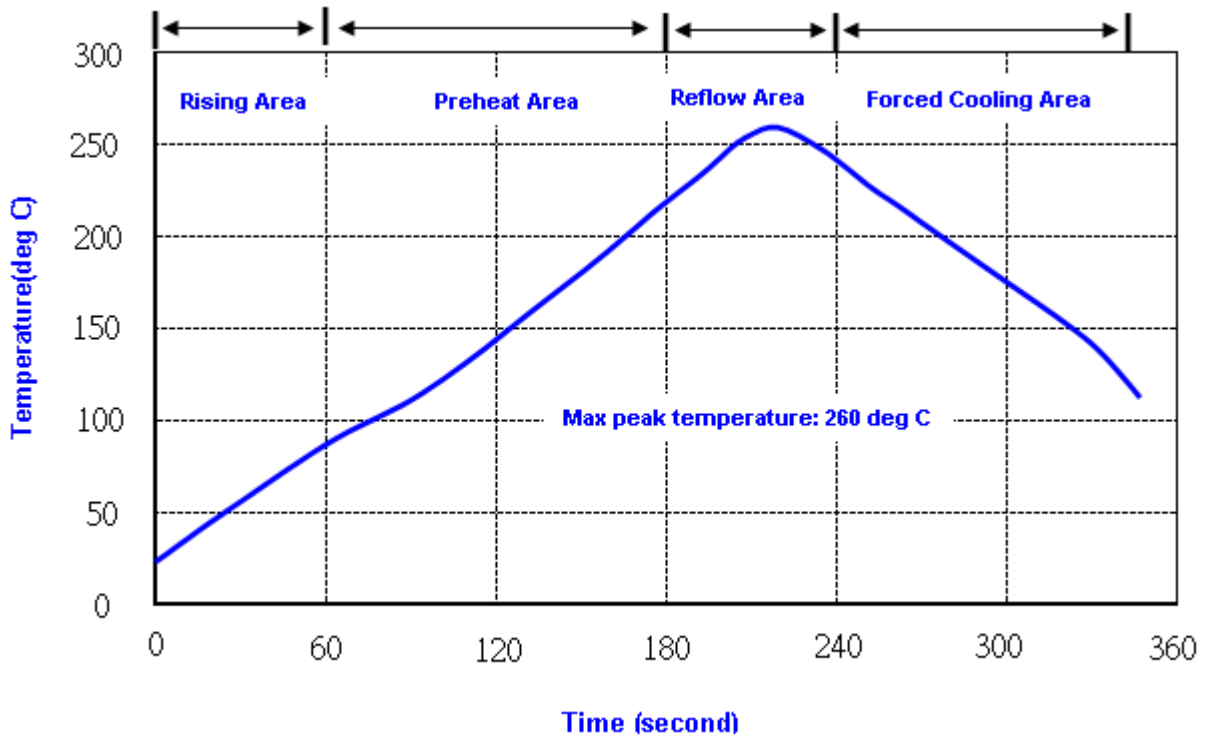


[NOTES]

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.

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