



# TAI-SAW TECHNOLOGY CO., LTD.

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

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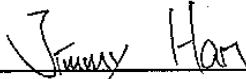
## Product Specifications Approval Sheet

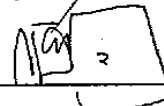
Product Description: SAW Resonator 423.22 MHz SMD 5.0X3.5 mm

TST Part No.: TC0553A

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

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

Checked by: Jimmy Han 

Approved by: Francis Chen 

Date: 2011/03/21

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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## SAW Resonator 423.22 MHz

MODEL NO.: TC0553A

REV. NO.:1

### A. FEATURES:

- 1-Port Resonator.

### B. MAXIMUM RATING:

1. Input Power Level: 0 dBm
2. DC voltage: 12 V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

### C. ELECTRICAL CHARACTERISTICS:

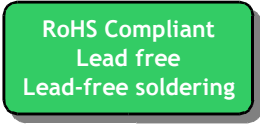
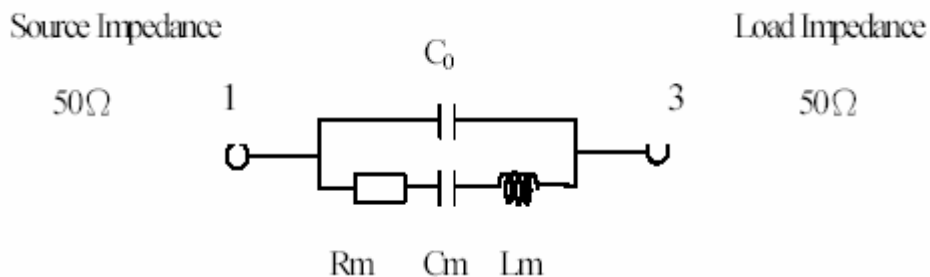
Reference Temperature  $T_A=25^\circ\text{C}$

Characteristic	Units	Minimum	Typical	Maximum
Center frequency <b>Fc</b>	<b>MHz</b>	423.145	423.220	423.295
Insertion Loss <b>IL</b>	<b>dB</b>	-	1.2	1.7
Ageing of fc	<b>ppm/yr</b>	-	-	±10
Equivalent Circuit Model				
Motional capacitance <b>C1</b>	<b>fF</b>	-	2.2	-
Motional inductance <b>L1</b>	<b>μH</b>	-	65.6	-
Motional resistance <b>R1</b>	<b>Ohm</b>	-	11.4	23
Parallel capacitance <b>Co</b>	<b>pF</b>	-	3.6	-
Frequency Temperature coefficient ( $TC_f$ )	<b>ppm/c*2</b>	-	0.032	-
Turnover $T_o$	<b>deg.C</b>	-	50	-
Package size	<b>mm</b>	SMD 5.0X3.5X1.4mm		

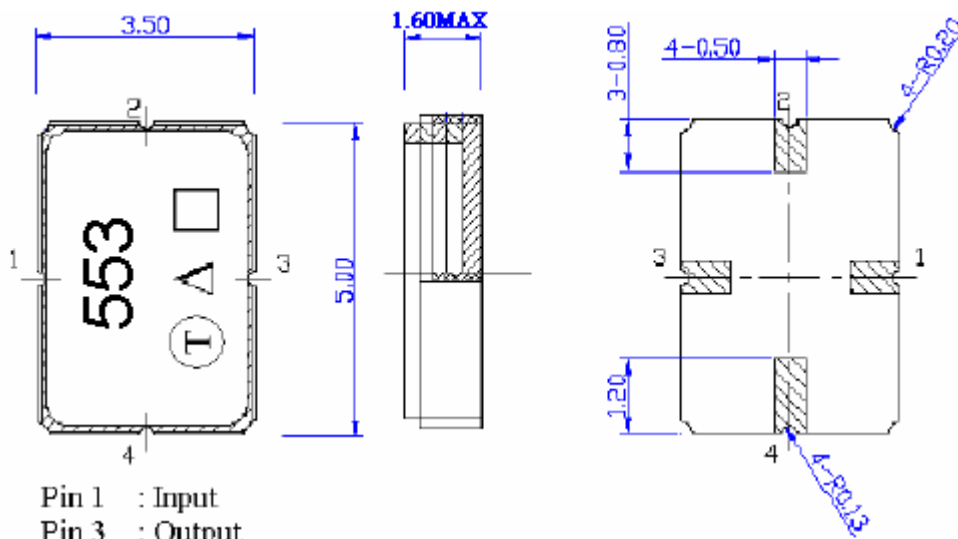
Temperature dependence of fc:  $f_c(T_A)=f_c(T_O)(1+TC_f(T_A-T_O)^2)$

### D. EQUIVIRENT CIRCUIT:

One-Port Resonator:



E. OUTLINE DRAWING:



Pin 1 : Input  
 Pin 3 : Output  
 Pin 2,4 : Ground

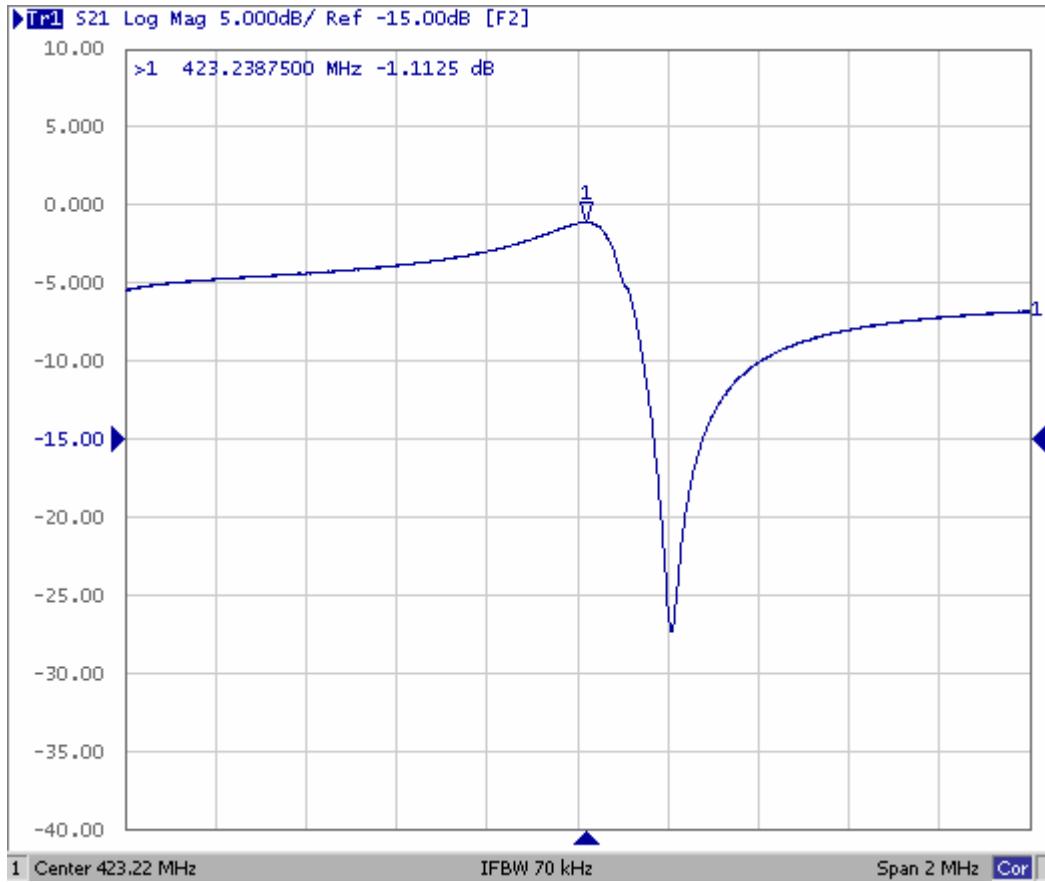
△ Year code

□ Week code(Follow Provided by planer each year)the table

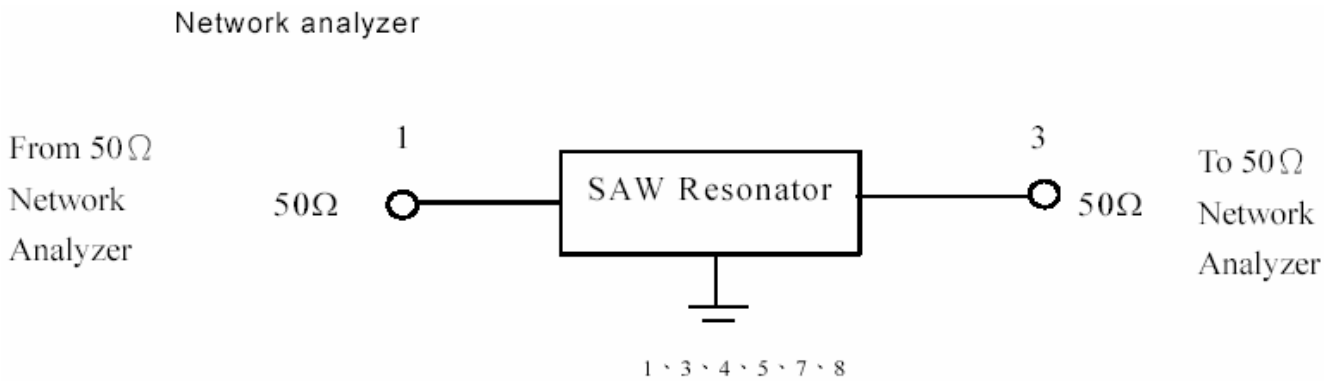
Year code	2005	2006	2007	2008
	2009	2010	2011	2012
	C	c	<u>C</u>	<u>c</u>

week code	1	2	...	26	27	28	...	52
	a	b	...	Z	a	b	...	z

F.FREQUENCY CHARACTERISTICS:

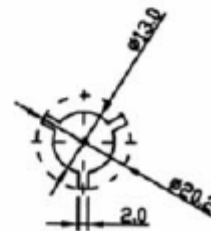
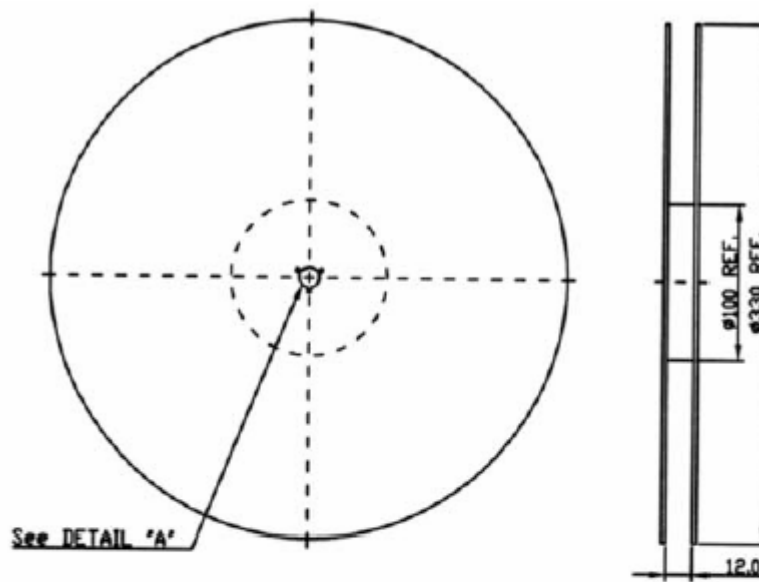


G. TEST CIRCUIT:



H. PACKING:

1. REEL DIMENSION



2. TAPE DIMENSION

