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# **Product Specifications Approval Sheet**

Product Description: SAV	Resonator 36	3.281 MHz SMD 3.8x3.8mm
TST Parts No.: TC0667A		
Customer Parts No.:		
Company:		
Division:		
Approved by :		
Date:		
Checked by:	Hong Pu Lin	Flong Pu Lin
Approval by:	Andy Yu	Hong Pu Lin Andy In

- 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.

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#### SAW Resonator 363.281 MHz

MODEL NO.: TC0667A Rev. NO. 1.0

#### A. 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

5. Moisture Sensitivity Level: Level 1(MSL1)



Electrostatic Sensitive Device

#### **B. ELECTRICAL CHARACTERISTICS:**

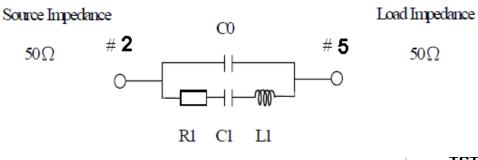
Characteristic	Units	Min	Type	Max	
Center frequency	MHz	363.256	363.281	363.306	
Insertion Loss	dB		1.5	2.2	
Unloaded Q Factor	-	7000	8800		
Motional Capacitance C1	fF	2.7	3.3		
Motional Inductance L1	μH		58		
Motional Resistance R1	Ω		15		
Parallel Capacitance Co	pF		4.5		
Frequency Temperature coefficient (TC <sub>f</sub> )	ppm/ <sup>0</sup> C <sup>2</sup>		0.032		
Turnover To	°C	10	25	40	
Package size	mm	3.8 x 3.8			

<sup>\*</sup>Frequency define by Yr(real) peak at room temperature.

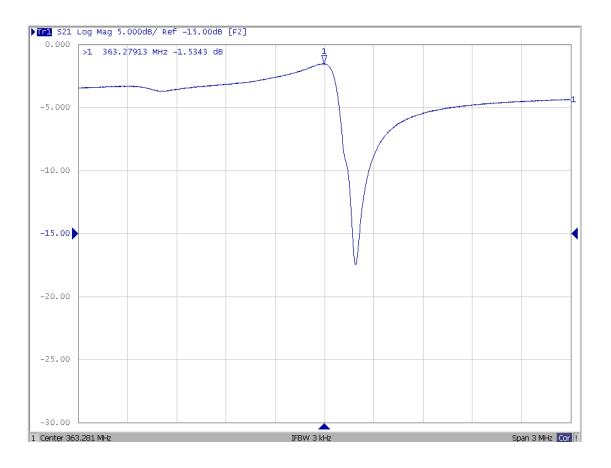
Temperature dependence of fc:  $fc(T_A)=fc(T_O)(1-TC_f(T_A-T_O)^2)$ 

### C. <u>EQUVIRENT CIRCUIT:</u>

One-Port Resonator:

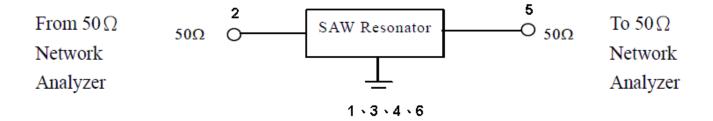


### D. FREQUENCY CHARATERISTICS:

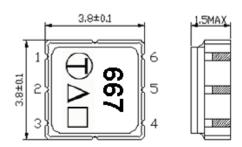


### E. TEST CIRCUIT:

Network analyzer



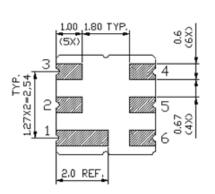
### F. MECHANICAL DIMENSIONS:





Unit:mm

Not Specified Tolerance : +/-0.15 mm



Pin No.₽	Symbol₽	Function₽		
1₽	GND₽	Ground₽		
2₽	IN₽	Input₽		
3₽	GND₽	Ground₽		
4₽	GND₽	Ground₽		
5₽	OUT₽	Output₽		
6₽	GND₽	Ground₽		

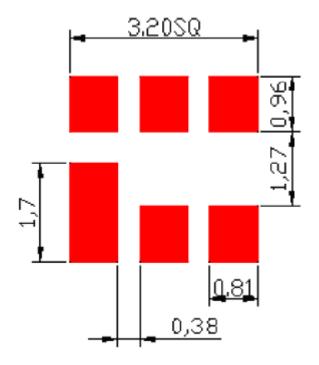
## △ Product Year Code

Year	2013	2014	2011 2015 2019	2016	
Product Code	С	С	С	С	

## Date Code Table:

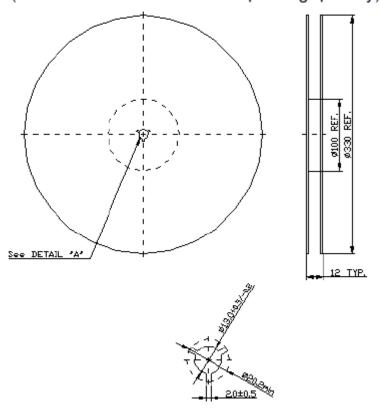
WK01	WK02	WK03	WK04	WK05	WK06	WK07	MK08	WK09	WK10	WK11	WK12	WK13
А	В	С	D	Е	F	G	Н	1	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	0	Р	Q	R	S	Т	U	V	W	Х	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
а	ь	c	d	0	f	g	h	i	j	k	1	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	0	р	q	r	S	t	u	ν	W	X	V	Z

### G. PCB FOOTPRINT:

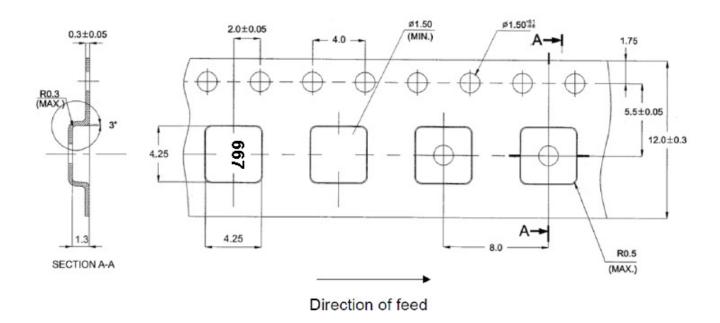


## **H. PACKING:**

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



#### 2. TAPE DIMENSION



#### I. RECOMMENDED REFLOW PROFILE:

- 1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
- 2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
- 3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C+0/-5°C peak (20~40sec).
- 4. Time: 2 times.

