



TAI-SAW TECHNOLOGY CO., LTD.

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

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Description: SAW Resonator 610.658 MHz

TST Parts No.: TC0668A

Customer Parts No.: _____

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Hong Pu Lin *Hong Pu Lin*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/05/16

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 610.658 MHz

MODEL NO.: TC0668A

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**)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. ELECTRICAL CHARACTERISTICS:

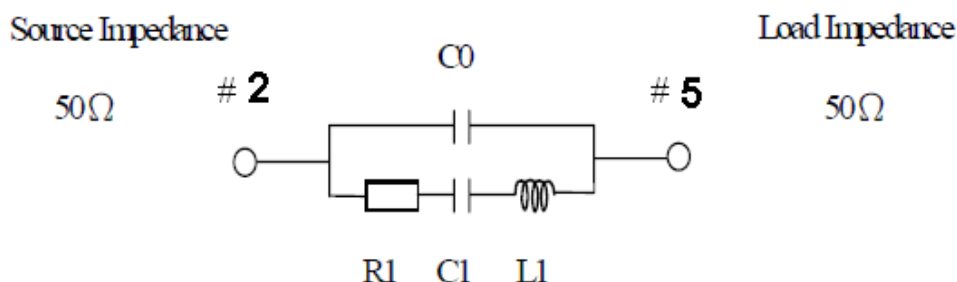
Characteristic	Units	Min	Type	Max
Center frequency	MHz	610.623	610.658	610.693
Insertion Loss	dB		1.2	2.2
Unloaded Q Factor	-		6000	
Motional Capacitance C1	fF	1.7	3.0	
Motional Inductance L1	μH		22	
Motional Resistance R1	Ω		13.5	
Parallel Capacitance Co	pF		3.7	
Frequency Temperature coefficient (TC_f)	ppm/°C ²		0.032	
Turnover To	°C	10	25	40
Package size	mm	3.8 x 3.8		

*Frequency define by Yr(real) peak at room temperature.

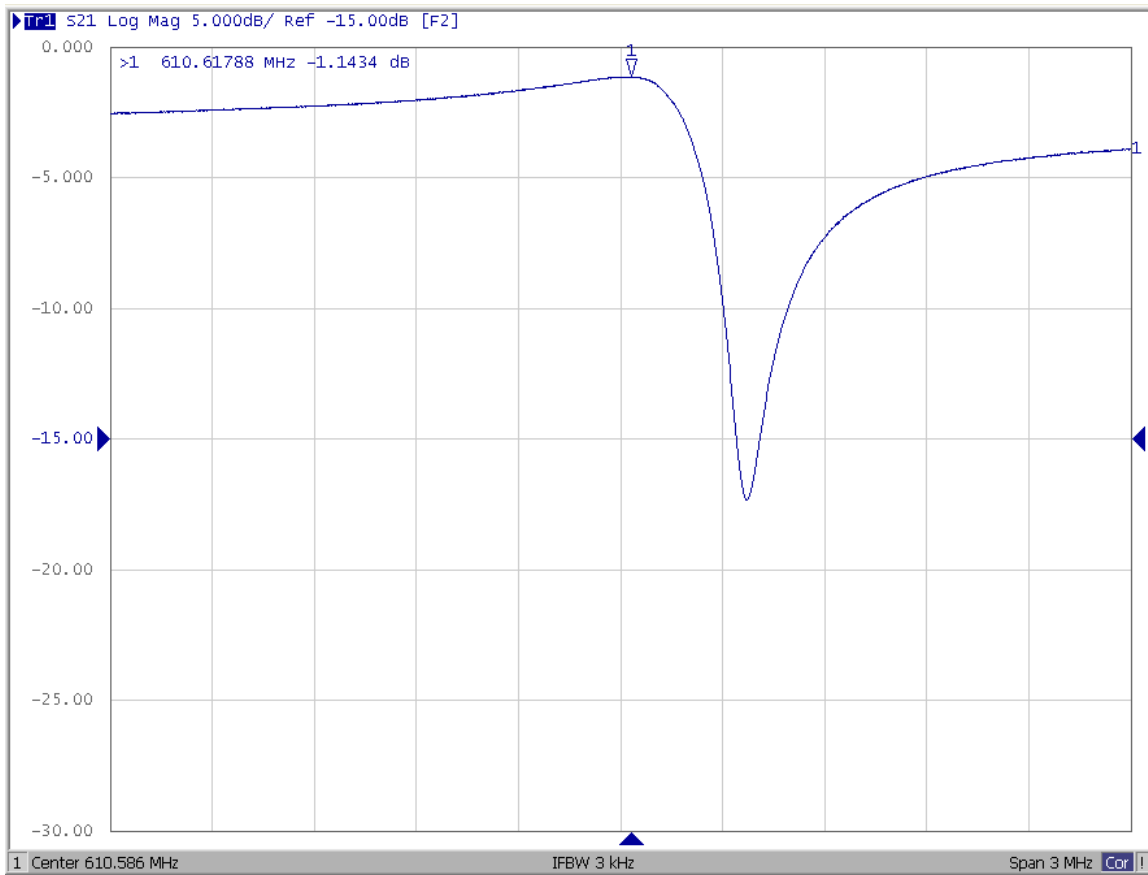
$$\text{Temperature dependence of } f_c: f_c(T_A) = f_c(T_0)(1 - TC_f(T_A - T_0)^2)$$

C. EQUIVRENT CIRCUIT:

One-Port Resonator:

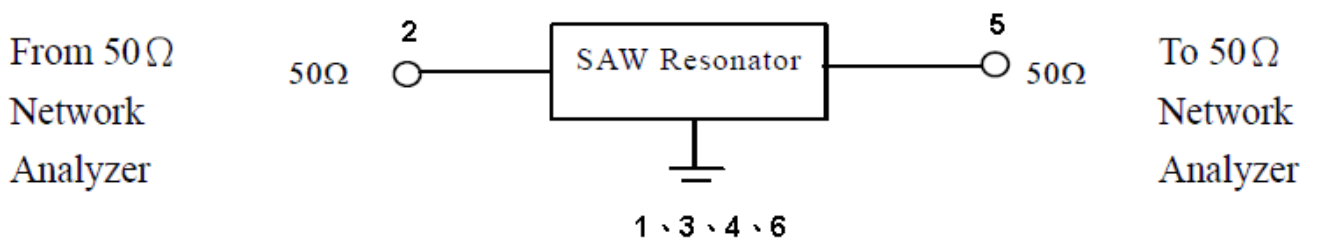


D. FREQUENCY CHARACTERISTICS:

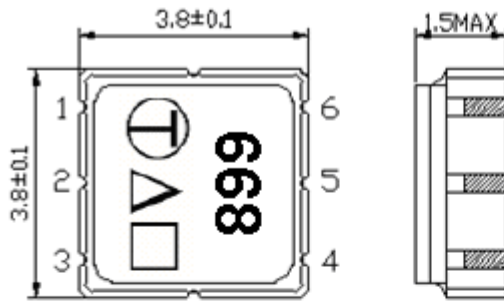


E. TEST CIRCUIT:

Network analyzer

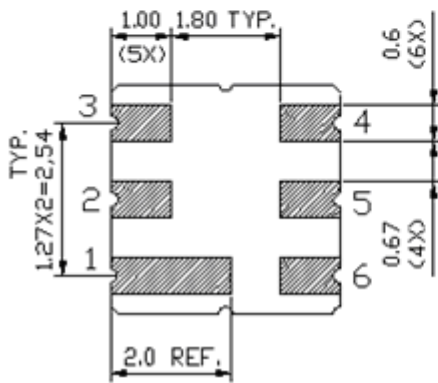


F. MECHANICAL DIMENSIONS:



Unit : mm

Not Specified Tolerance : +/-0.15 mm



Pin No.φ	Symbolφ	Functionφ
1φ	GNDφ	Groundφ
2φ	INφ	Inputφ
3φ	GNDφ	Groundφ
4φ	GNDφ	Groundφ
5φ	OUTφ	Outputφ
6φ	GNDφ	Groundφ

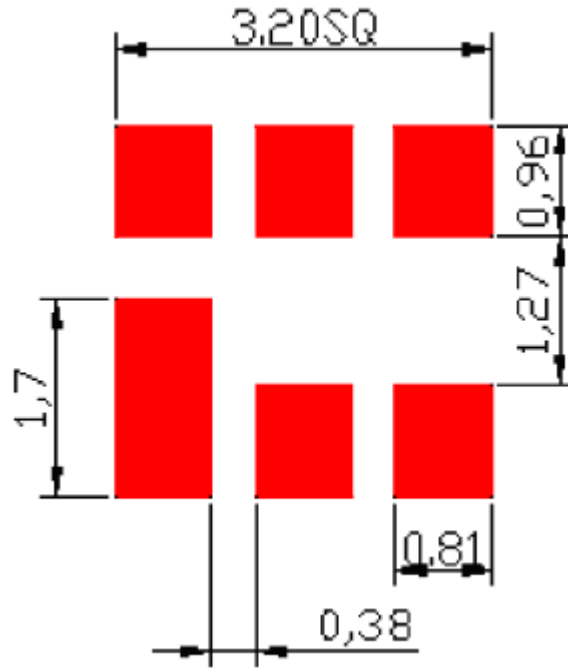
△ Product Year Code

Year	2009	2010	2011	2012
	2013	2014	2015	2016
	2017	2018	2019	2020
Product Code	C	c	C	c

□ 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

G. PCB FOOTPRINT:



H. PACKING:

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

