TAI-SAW TECHNOLOGY CO., LTD.
No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 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 Name: SAW Resonator 622.31 MHz SMD 3.8X3.8 mm

TST Parts No.: TC0172B

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Hongpu Lin Hong Pu Lin

Approval by: Andy Yu Andy Yu

Date: 2019/11/08

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 622.310 MHz

MODEL NO.: TC0172B REV. NO.:4.0

A. FEATURES:

1. 1-Port Resonator.

RoHS Compliant
Lead free
Lead-free soldering

B. MAXIMUM RATING:

1. Input Power Level: 0 dBm
2. 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 **S**ensitive **D**evice

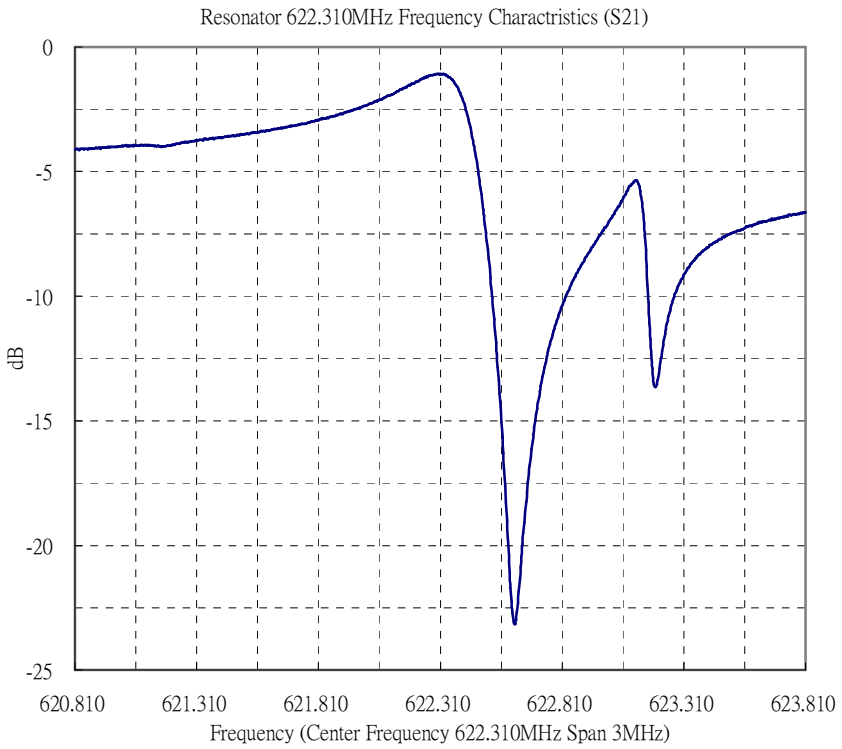
C. ELECTRICAL CHARACTERISTICS:

Reference Temperature T_A=25℃

Characteristic	Units	Minimum	Typical	Maximum
Center frequency Fc	**MHz**	622.270	622.310	622.340
Insertion Loss IL	**dB**	-	1.0	2.0
Unload quality factor Q_U		6000	7000	-
Motional capacitance C1	**fF**	-	1.85	-
Motional inductance L1	**μH**	-	35.38	-
Motional resistance R1	**Ohm**	-	14.19	-
Parallel capacitance Co	**pF**	-	2.99	-
Frequency Temperature coefficient C_f)	**ppm/c*2**	-	0.032	-
Turnover To	**deg.C**	10	25	40
Package size		SMD 3.8X3.8X1.2mm		

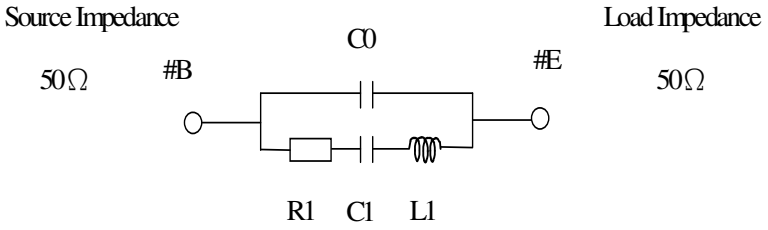
Temperature dependence of fc: $fc(T_A)=fc(T_O)(1+TC_f(T_A-T_O)^2)$

D.FREQUENCY CHARACTERISTICS:



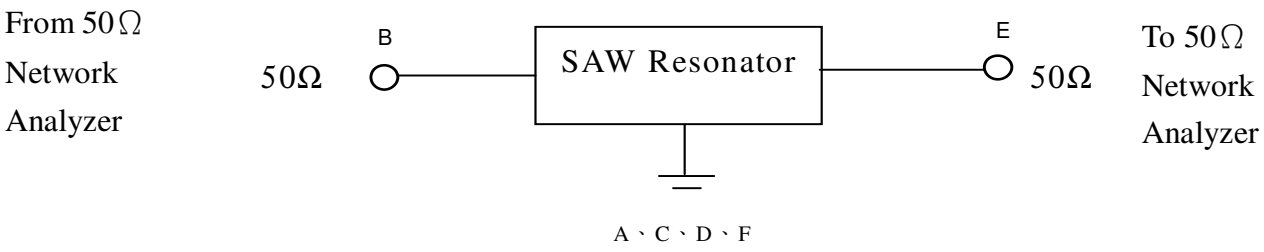
E.EQUVIRENT CIRCUIT:

One-Port Resonator:



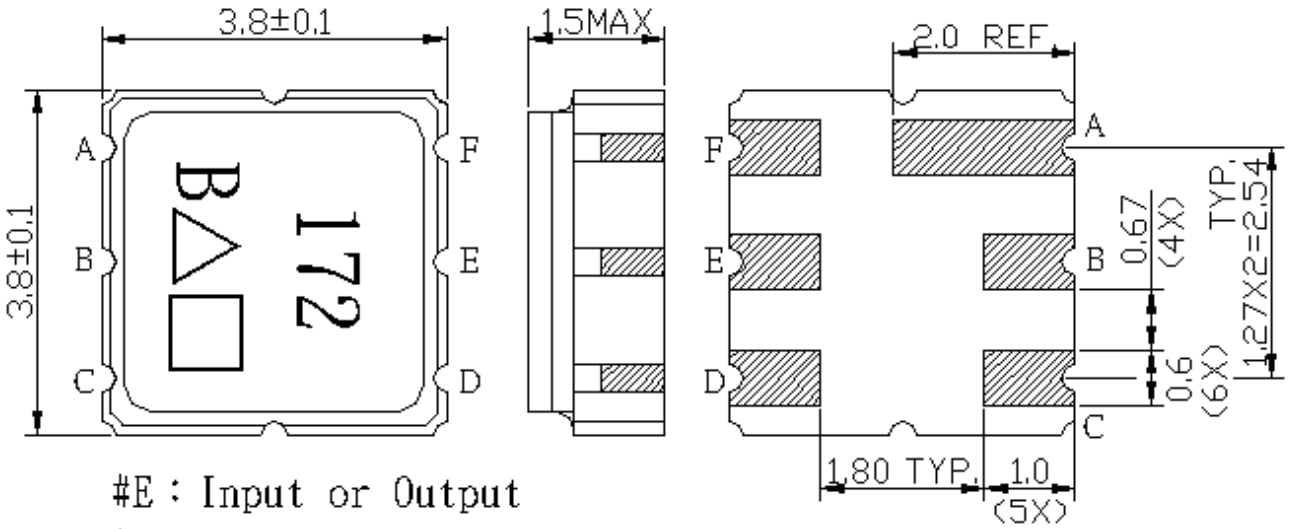
F. TEST CIRCUIT:

Network analyzer



A、C、D、F

G.OUTLINE DRAWING:



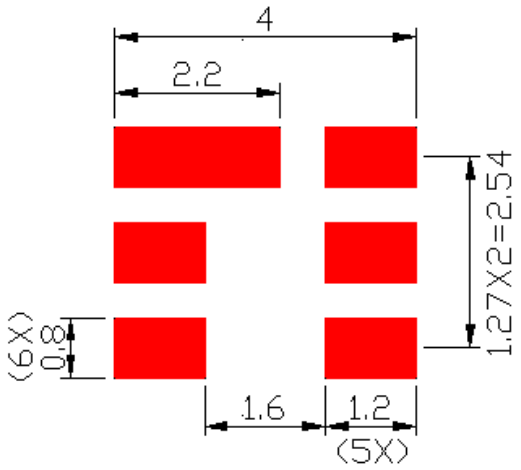
Product / Year Code- 2year cycle

Year	2019 2021	2020 2022
Product Code	C	c

Week Code Table

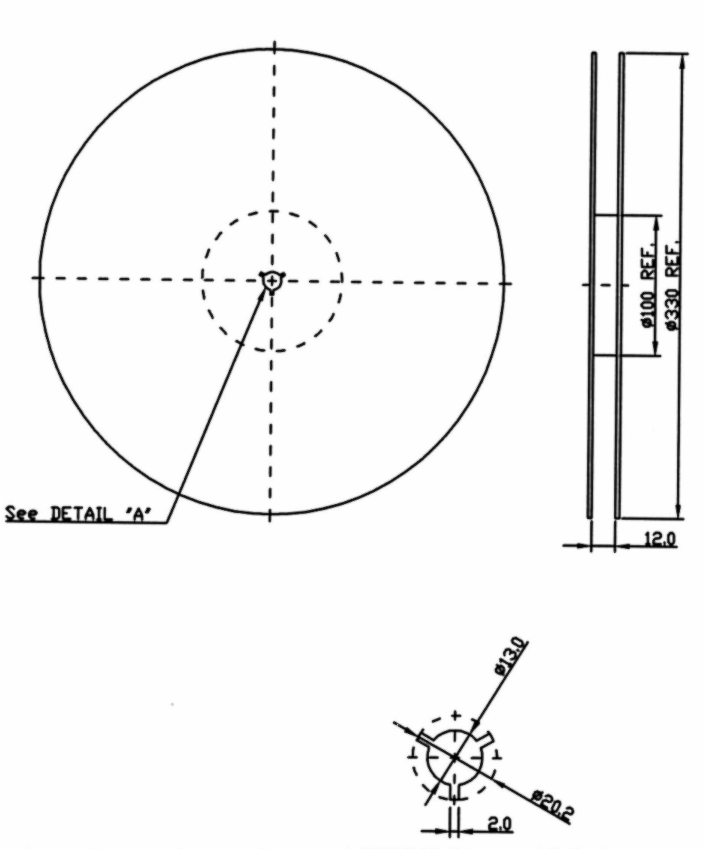
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	**WK15**	**WK16**	**WK17**	**WK18**	**WK19**	**WK20**	**WK21**	**WK22**	**WK23**	**WK24**	**WK25**	**WK26**
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	**WK28**	**WK29**	**WK30**	**WK31**	**WK32**	**WK33**	**WK34**	**WK35**	**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

H. PCB FOOTPRINT:

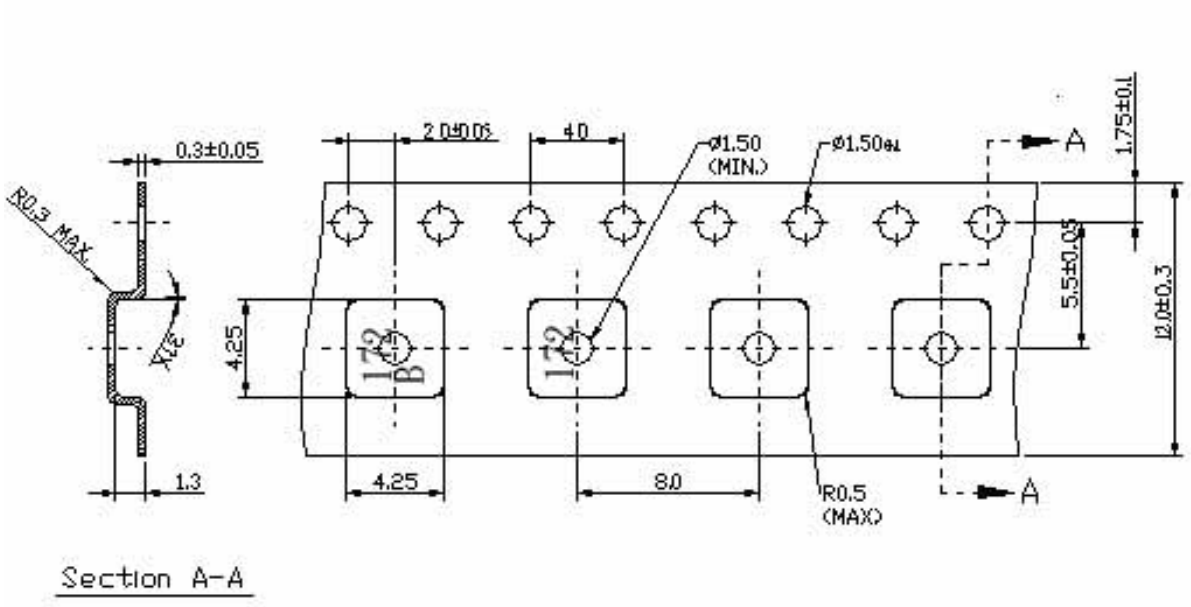


I. PACKING:

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



2. TAPE DIMENSION



J. RECOMMENDED REFLOW PROFILE:

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