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: 172.25 MHz 0.2 MHz BW SMD 13.3X6.5 mm IF SAW Filter

TST Parts No.: TB1205A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Kazuma Lee

Approval by: Bob Chau

Date: 11 / 10 / 2015

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 Filter 172.25MHz (SMD 13.3×6.5 mm)

MODEL NO.: TB1205A Rev. NO. 1.0

A. MAXIMUM RATINGS:

1. Operating Temperature: -40°C to 85°C
2. Storage Temperature: -40°C to 85°C
3. Input Power: 15 dBm
4. DC Voltage : 5V

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic **S**ensitive **D**evice

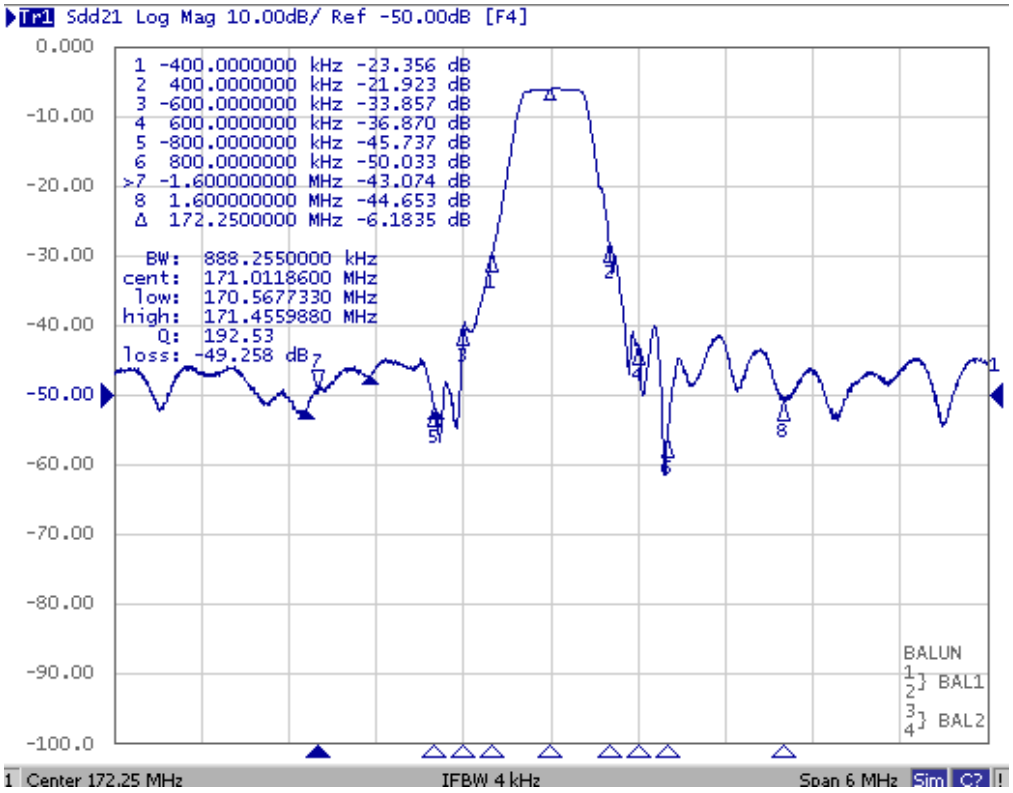
B. ELECTRICAL CHARACTERISTICS:

1. Ambient Temperature: 25 °C

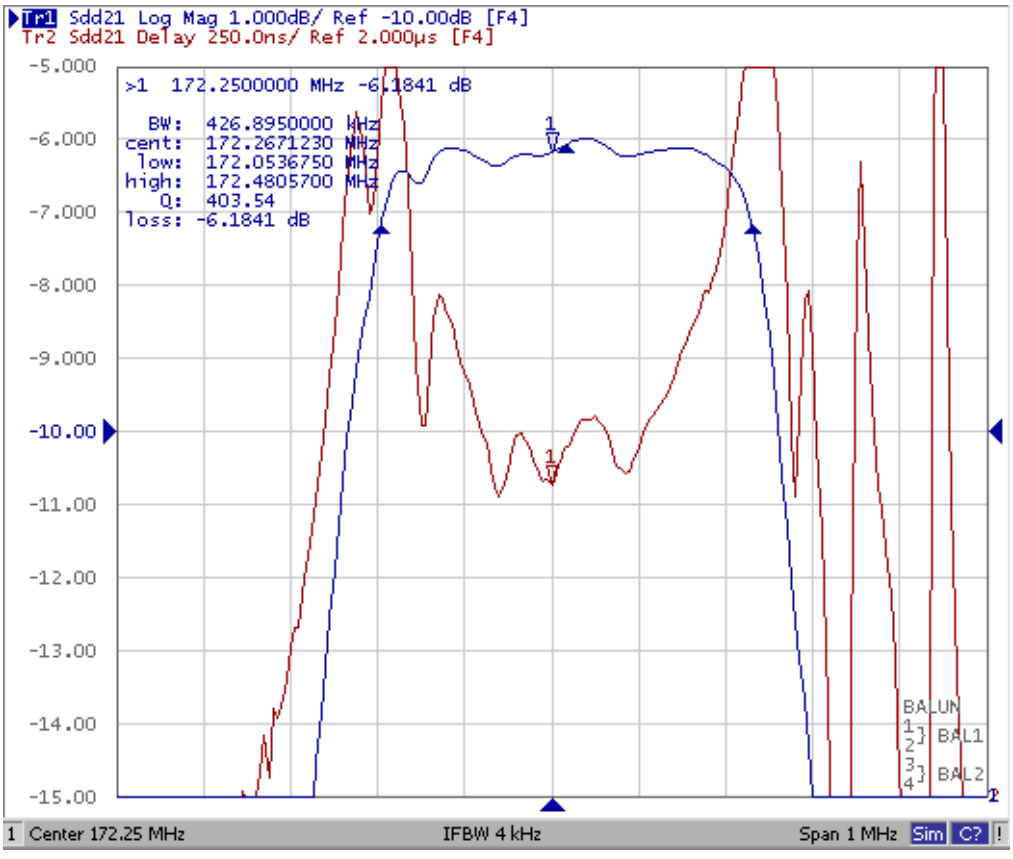
Characteristics		Value		
		Min.	**Typ.**	**Max.**
Center frequency Fo	**MHz**	-	172.25	-
Insertion Loss at Fo	**dB**	-	6.0	7.4
Amplitude ripple variation (Fo +/-100KHz)	**dB**	-	0.4	1.0
Group Delay variation (Fo +/-90KHz)	**nsec**	-	340	500
In/Output VSWR (Fo +/-90KHz)		-	2.6	-
Relative Attenuation	**dB**			-
Fc ±400KHz ~ Fc ±600KHz		15	21	-
Fc ±600KHz ~ Fc ±800KHz		30	33	-
Fc ±800KHz ~ Fc ±1.6MHz		30	35	-
Fc ±1.6KHz ~ Fc ±3.0MHz		35	38	-
Fc ±3.0MHz ~ Fc ±35.0MHz		35	38	-
10 ~ Fc-35 MHz		45	60	-
Fc+35 MHz ~ 2000 MHz		45	60	-
				-
Temperature Coefficient	**ppm/°C²**		-0.036	
Source Impedance (Differential)	**Ω**	-	200/200	-
Load Impedance (Differential)	**Ω**	-	200/200	-

C. FREQUENCY CHARACTERISTICS:

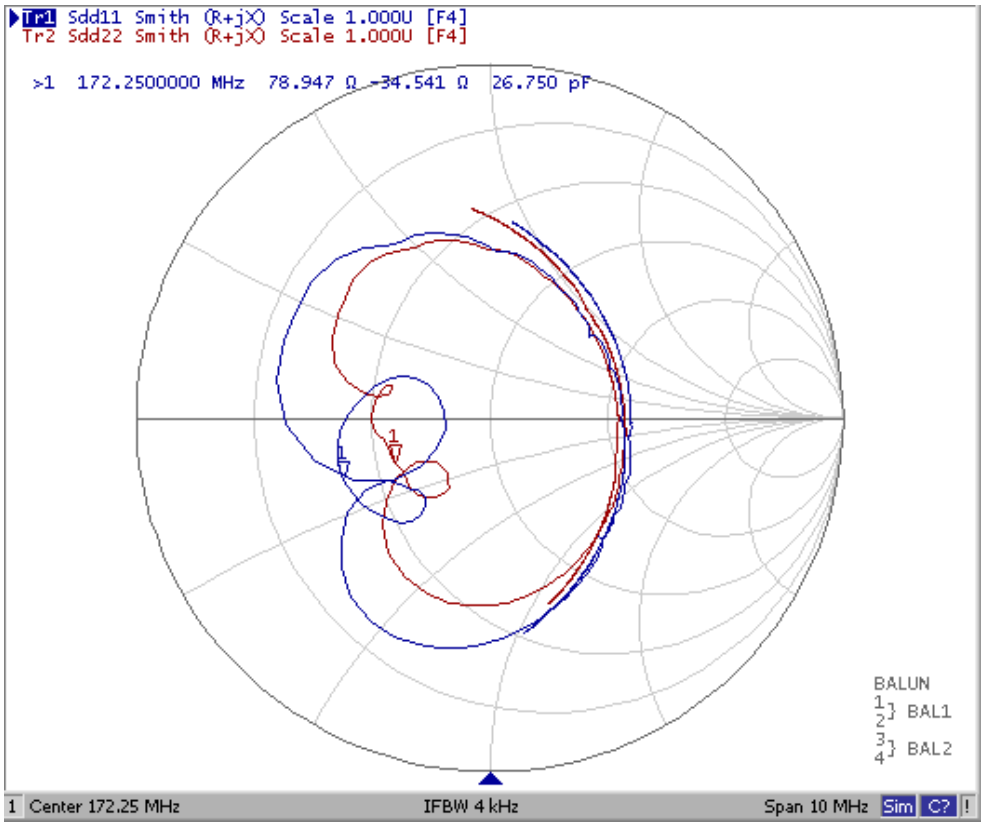
(1) Narrow band Response:



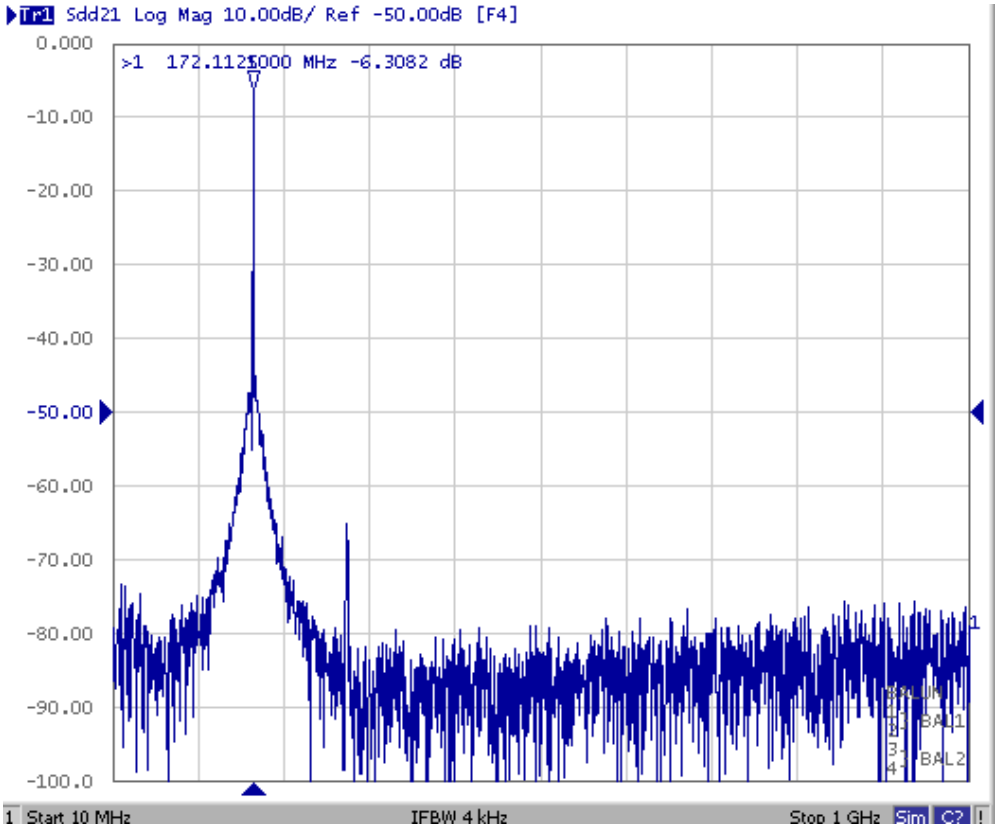
(2) Pass Band Response and Group Delay Response:



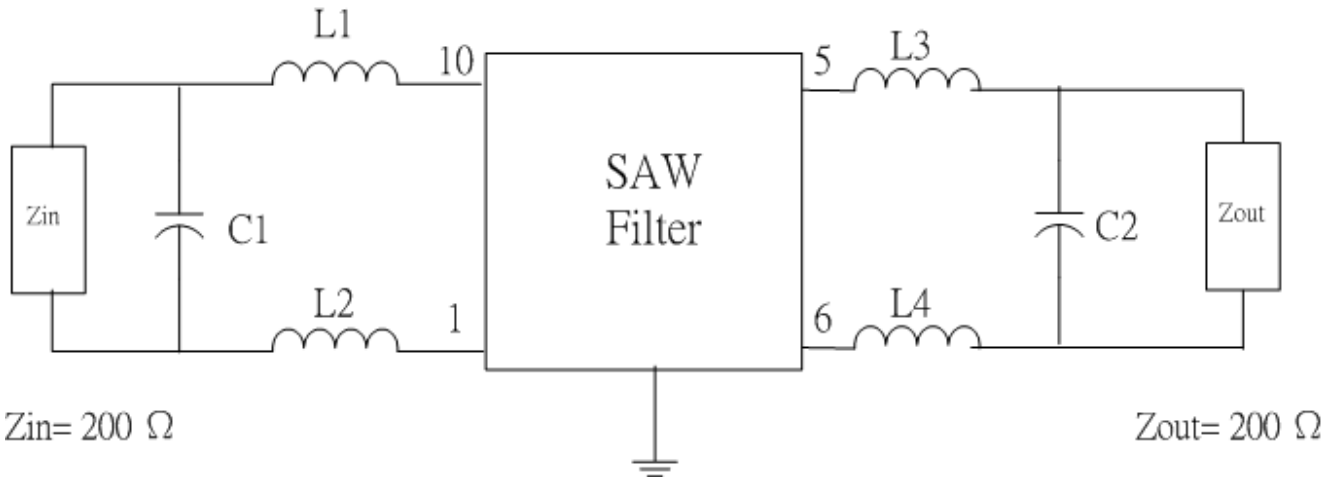
(3) Smith Chart:



(4) Wide Band Response:

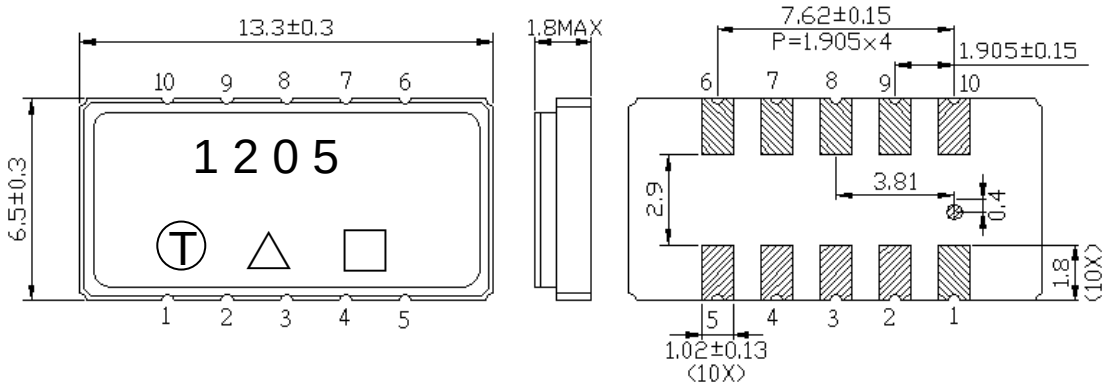


D. MATCHING CIRCUIT:



L1=L2=43nH L3=L4=39nH C1=20pF C2=24pF

E. OUTLINE DRAWING:



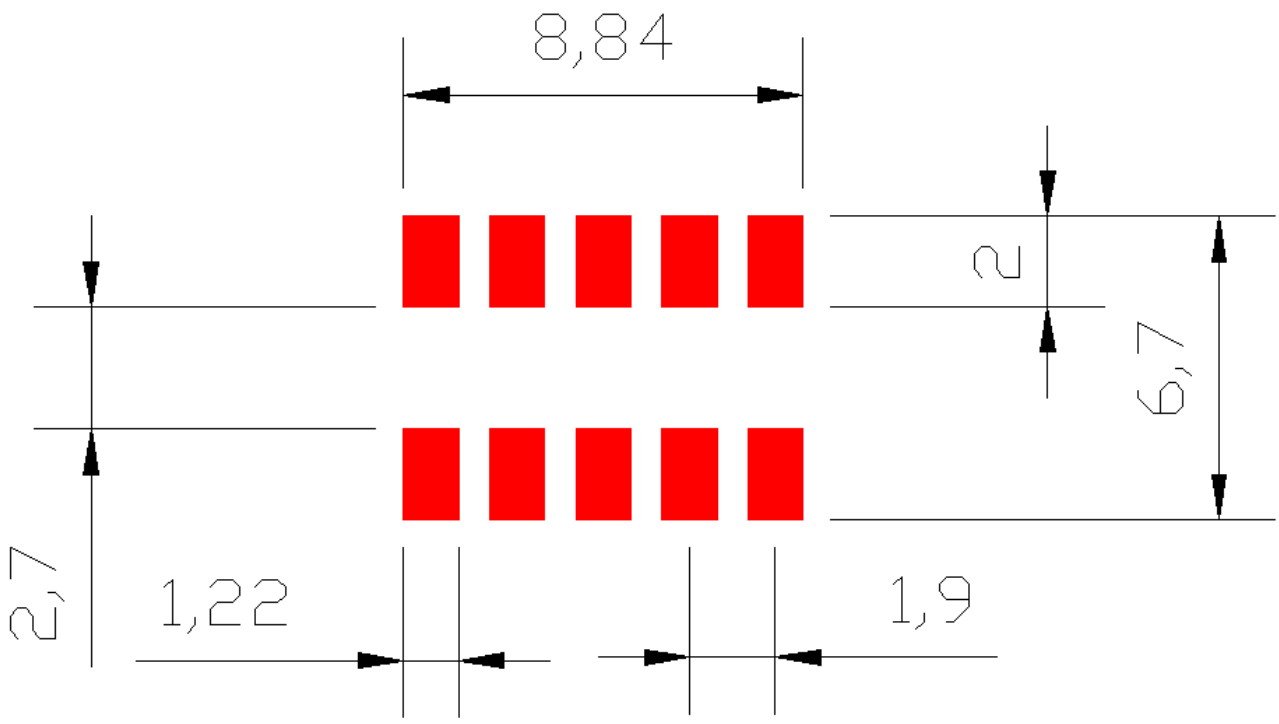
#10: Input
#1 : Balanced Input or Ground
#5 : Output
#6 : Balanced Output or Ground
#2,3,4,7,8,9: Ground
□: Week Code
Unit: mm
△ : Product / Year Code

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	B	b

Week Code Table

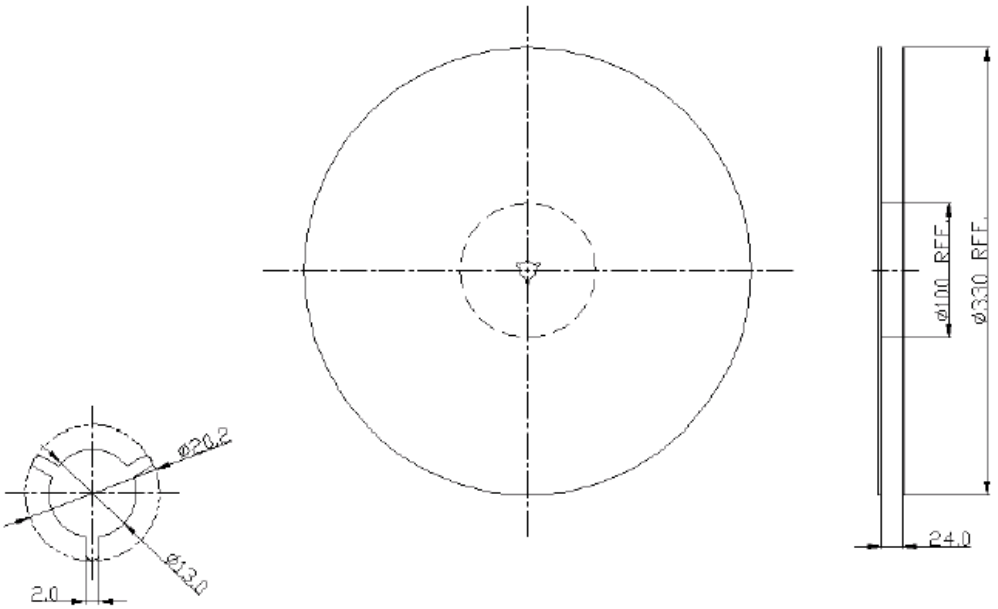
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

F. PCB FOOTPRINT

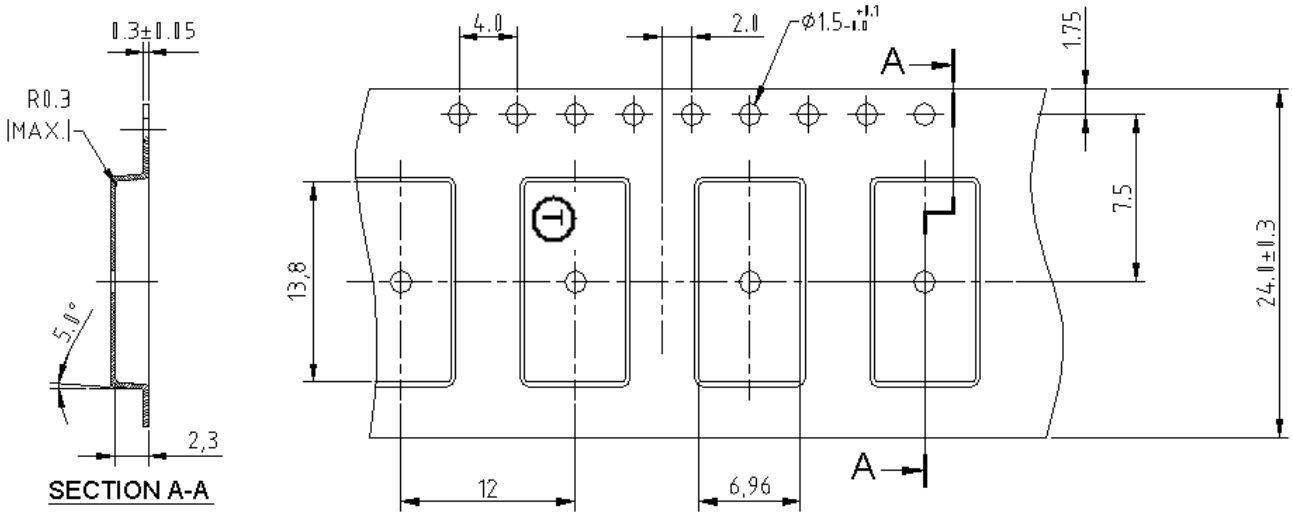


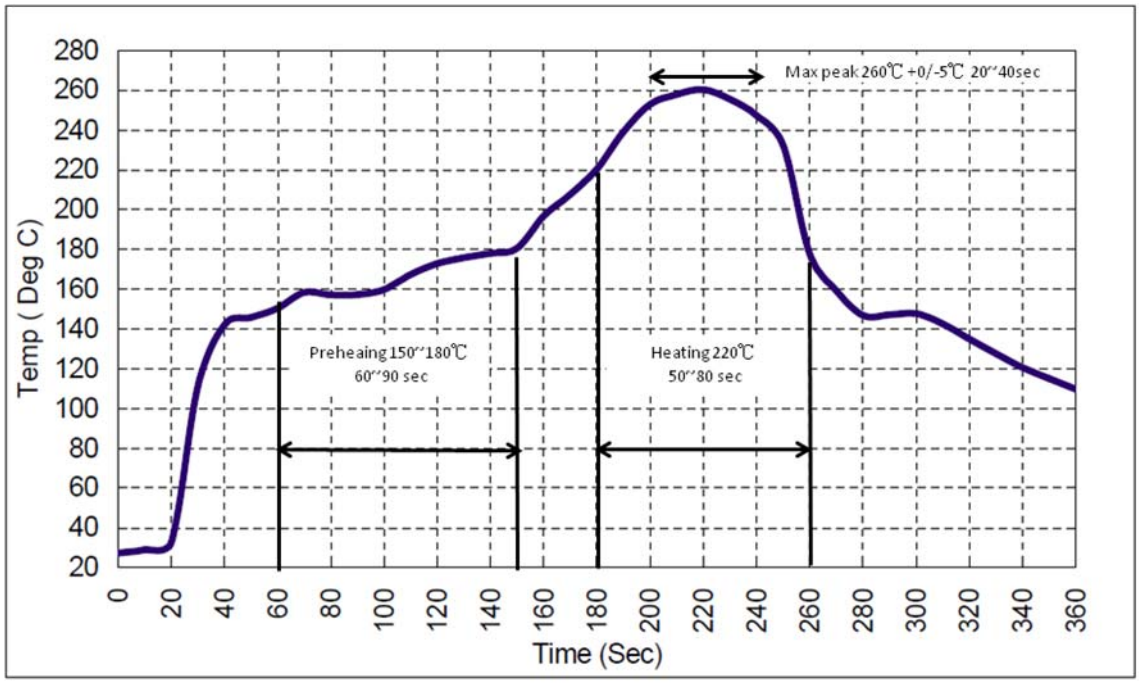
G. PACKING:

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



2. TAPE DIMENSION



H. 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.