



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Description: SAW Filter 2442 MHz SMD 1109(BW=79MHz)

TST Part No.: TA2620A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Michael Yang *Michael*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2021/08/02

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 2442MHz SMD1.1x0.9mm (79MHz BW)

MODEL NO.:TA2620A

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 25dBm (2402.5~2481.5MHz) (Ta=+50deg C, 5000h)
2. DC Voltage : 5V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +10°C
5. Moisture Sensitivity Level: Level 3
- 6 .ESD 50V(MM) 100V(HBM)



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : Zs = 50 Ω (Single-ended)

Terminating load impedance : ZL = 50 Ω (Single-ended)

Item	Unit	Min.	Typ.	Max.	Note
Center Frequency Fc	MHz	-	2442		-
Insertion Loss (2402.5~2421.5MHz) IL	dB(*1)(*2)		1.7	2.2	23~27°C
Insertion Loss (2402.5~2421.5MHz) IL	dB(*1)(*2)		1.7	2.6	CH1
Insertion Loss (2407.5~2471.5MHz) IL	dB(*1)(*2)		1.7	2.2	CH2 to 11
Insertion Loss (2457.5~2476.5MHz) IL	dB(*1)(*2)		1.9	2.4	CH12
Insertion Loss (2462.5~2481.5MHz) IL	dB(*1)(*2)		2.3	2.5	23~27°C
Insertion Loss (2462.5~2481.5MHz) IL	dB(*1)(*2)		2.3	3.0	CH13
Insertion Loss (2402.5~2481.5MHz) IL	dB(*1)(*2)		2.3	3.0	
Amplitude Ripple (2402.5~2481.5MHz)	dB	-	0.8	2.0	Any 19 MHz
Input VSWR (2402.5~2481.5MHz)			1.5	2.3	
Output VSWR (2402.5~2481.5MHz)			1.5	2.3	
Attenuation (reference level from 0 dB)					

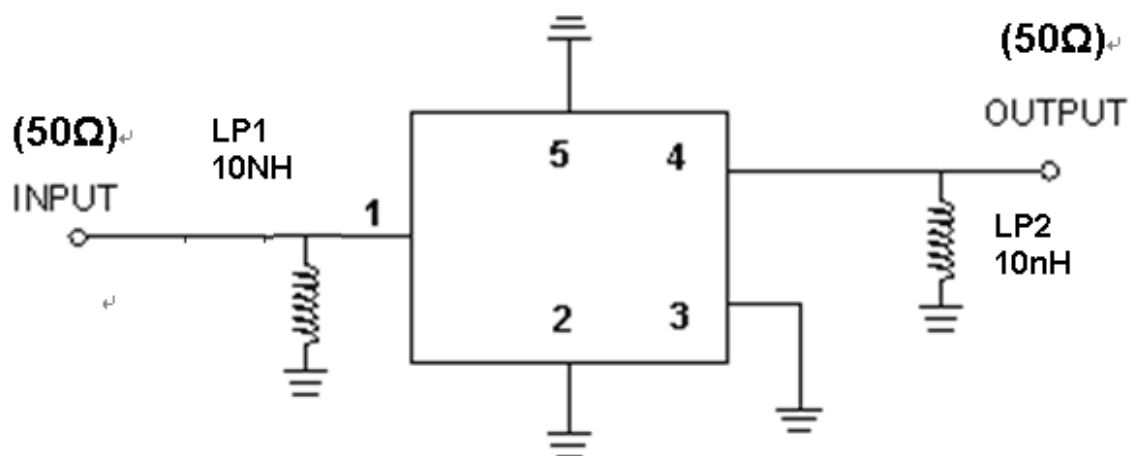
699 ~ 960 MHz	dB	27	32	-	-
1425 ~ 2170 MHz	dB	24	28	-	-
2300 ~ 2370 MHz	dB(*3)	10	25	-	
2370 ~ 2375 MHz	dB(*3)	8	12	-	23~27°C
2375 ~ 2380 MHz	dB(*3)	5	7	-	23~27°C
2500 ~ 2505 MHz	dB(*3)	5	10	-	23~27°C
2505 ~ 2510 MHz	dB(*3)	15	25	-	23~27°C -
2510 ~ 2570 MHz	dB(*3)	25	35	-	23~27°C
2570 ~ 2690 MHz	dB	25	32	-	
2690 ~ 4500 MHz	dB	25	32	-	

(*1) Specification of insertion loss excludes loss that comes from the test board.

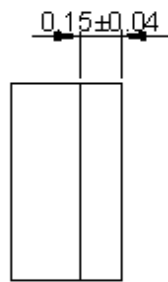
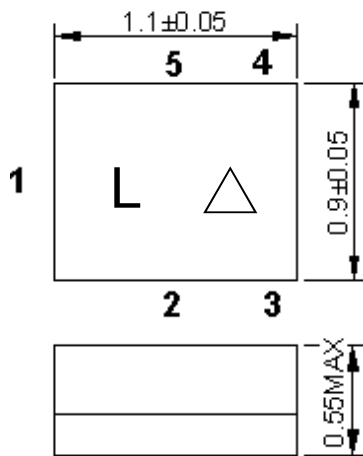
(*2) Integrated Insertion Loss over 19MHz CH BW.

(*3) Integrated attenuation over 5MHz CH BW.

C. MEASUREMENT CIRCUIT:



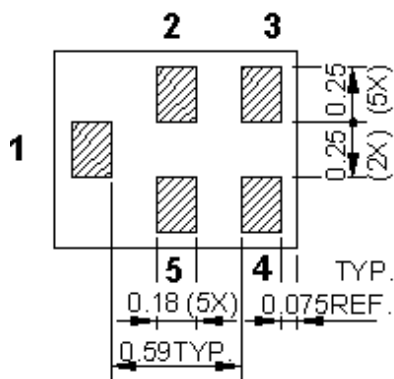
D. OUTLINE DRAWING:



All tolerances are ± 0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

Unit : mm



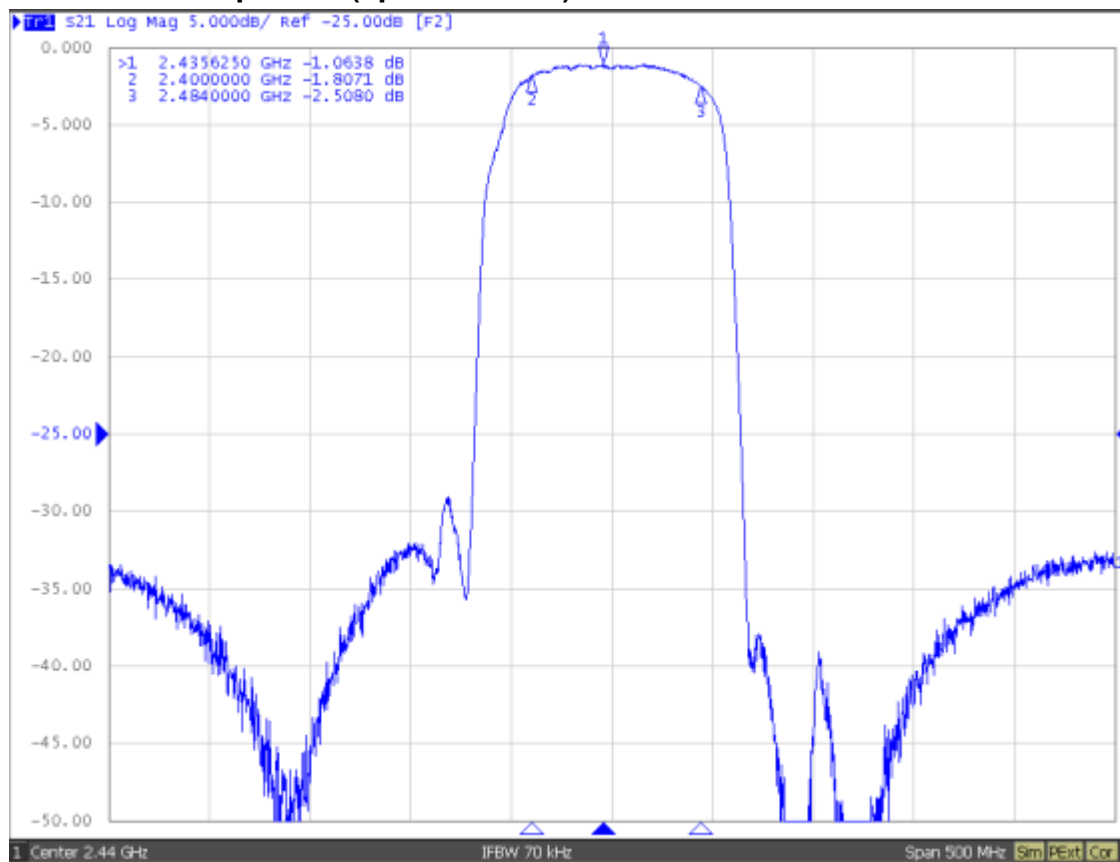
Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

Δ : Year/Month Code (Follow the table)

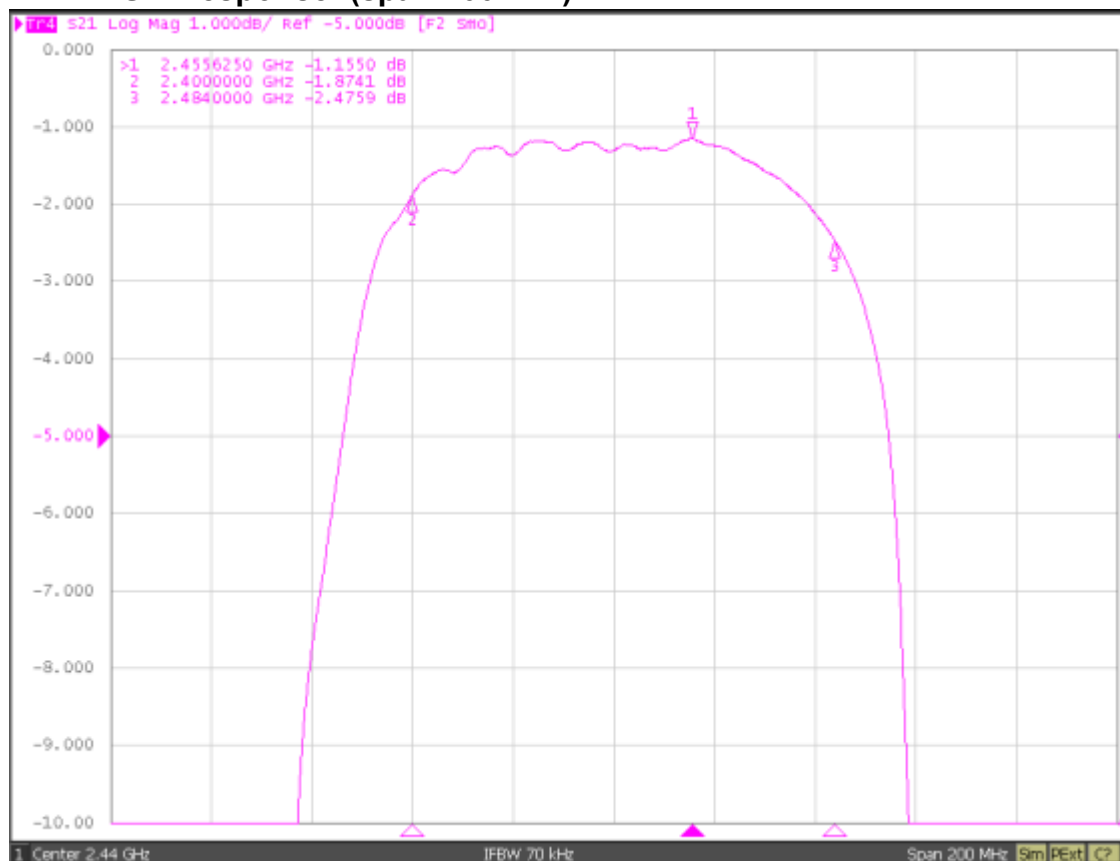
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m
2024	n	p	q	r	s	t	u	v	w	x	y	z
2025	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2026	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2027	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>i</u>	<u>k</u>	<u>l</u>	<u>m</u>
2028	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

E. Frequency Characteristics:

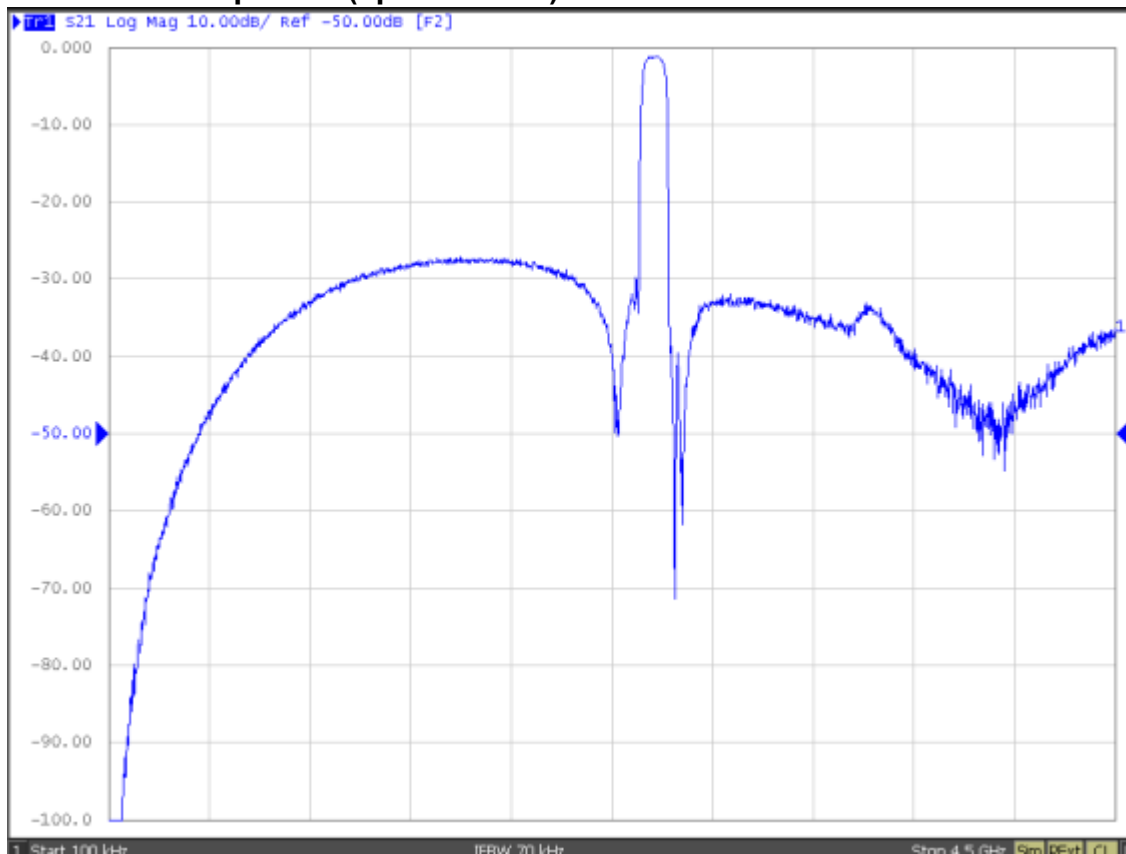
S21 response: (span 500MHz)



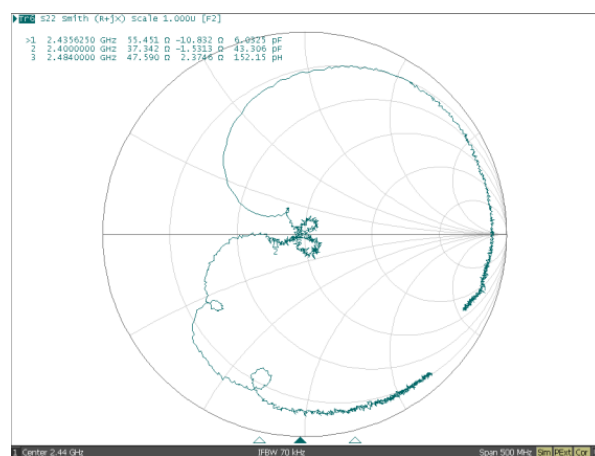
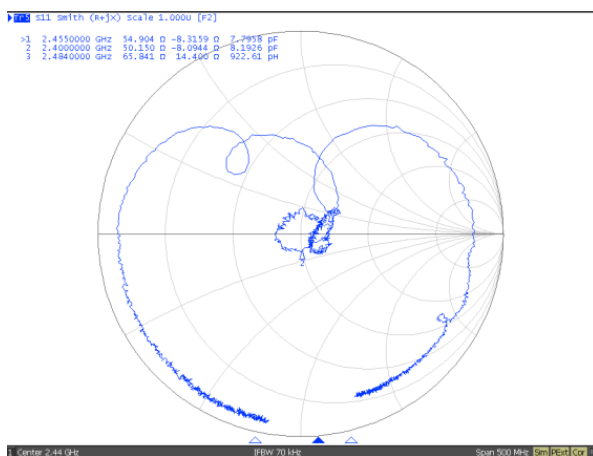
S21 response: (span 200MHz)



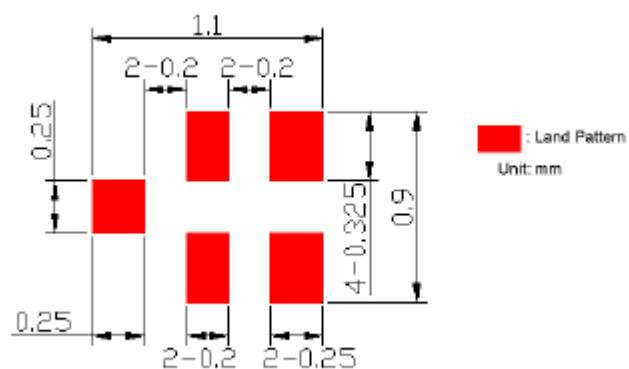
S21 response: (span 4.5GHz)



S11 & S22



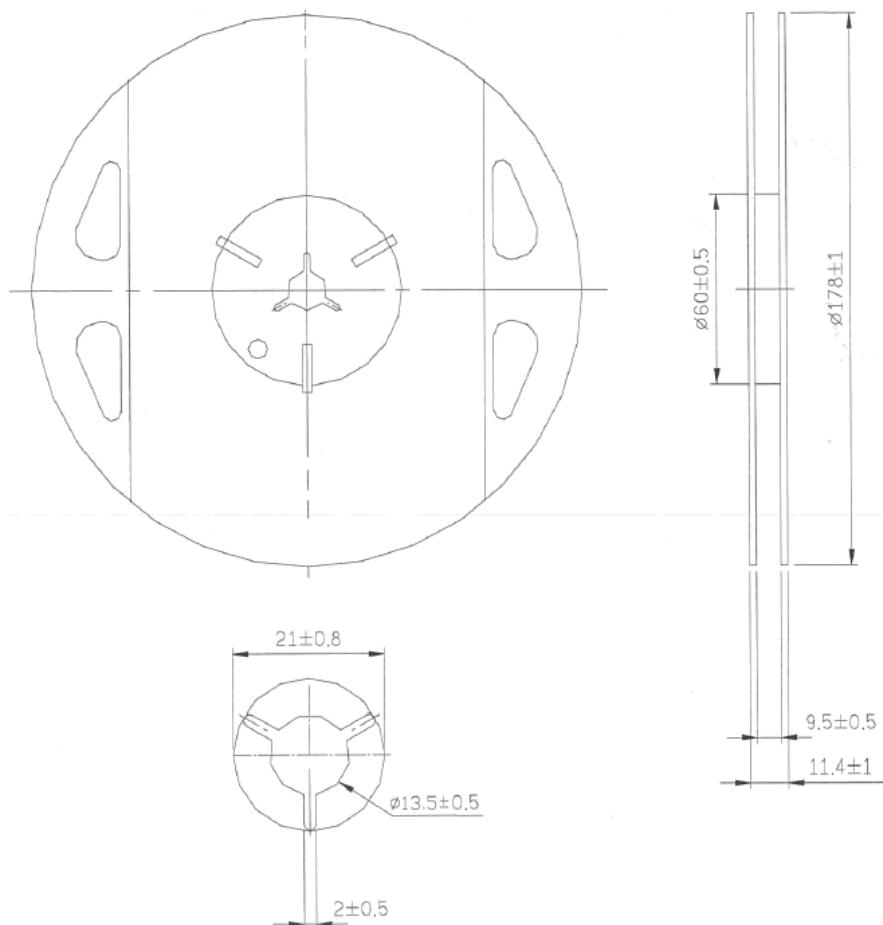
F. PCB Footprint :



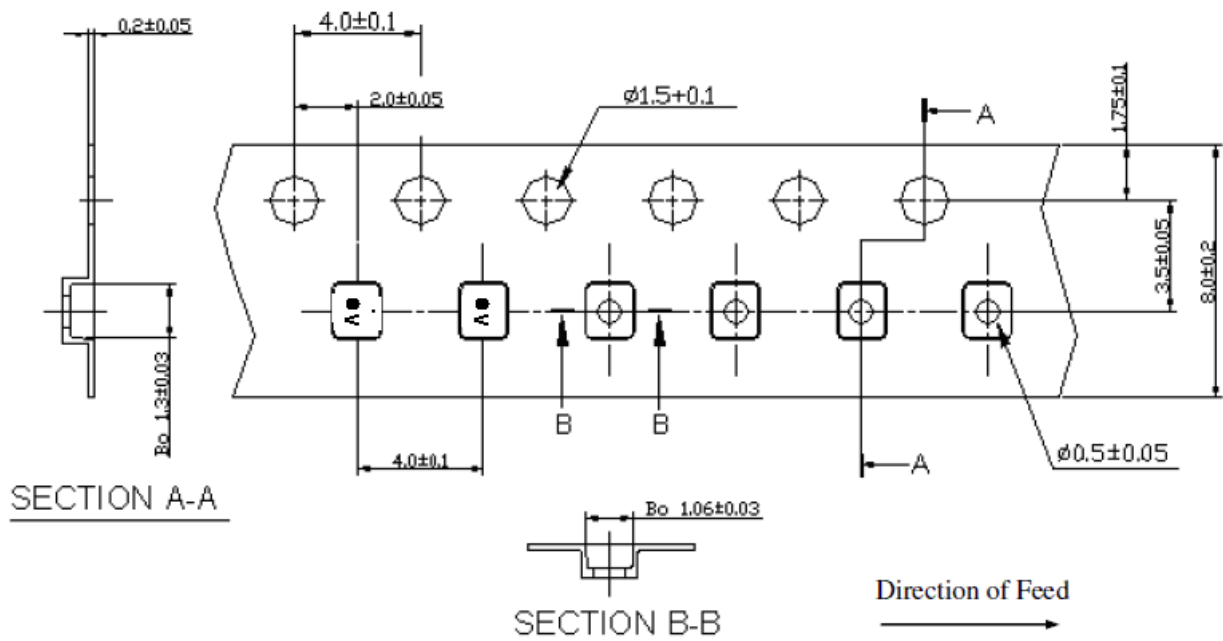
G. PACKING:

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°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 245~260°C peak (min. 10sec).
4. Time : 2 times.

