



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 1176.45 MHz SMD 1.1X0.9 mm (BW=20MHz)

TST Parts No.: TA2543B

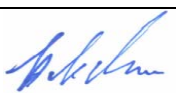
Customer Parts No.: _____

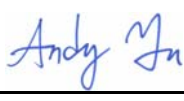
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Bob Chau 

Approval by: _____ 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 1176.45MHz BW20MHz SMD 1.1x0.9mm

MODEL NO.:TA2543B

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 13 dBm (2000h)
2. DC Voltage : 3 V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +125°C
5. ESD Machine Mode : 50V
6. ESD Human Body Mode : 100V
7. Moisture Sensitive Level (MSL): Level 2a

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Temperature range for specification : Tspec = -40°C to +105°C

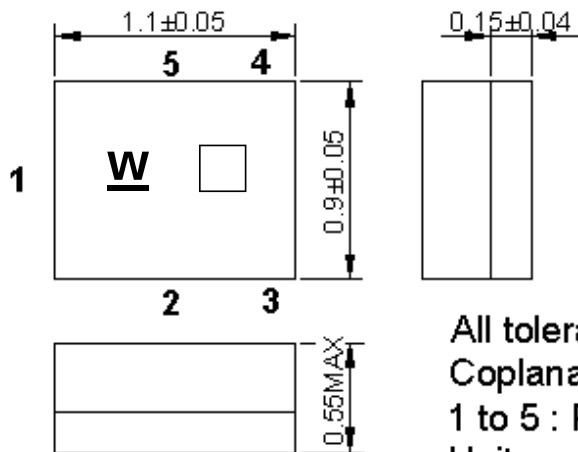
Terminating source impedance : Zs = 50 Ω

Terminating load impedance : ZL = 50 Ω

Item	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	1176.45	-
Insertion Loss (1166.45~1186.45 MHz) IL	dB	-	1.4	2 ⁽¹⁾
Insertion Loss (1166.45~1186.45 MHz) IL	dB	-	1.4	2.2
Amplitude Ripple (1166.45~1186.45 MHz)	dB _{p-p}	-	0.4	1.3
VSWR (1166.45~1186.45 MHz)		-	1.6	2.1
Attenuation (refer to 0 dB)				
100 ~ 1080 MHz	dB	30	44	-
1080 ~ 1130 MHz	dB	20	26	-
1230 ~ 2000 MHz	dB	30	32	-
2000 ~ 3000 MHz	dB	25	29	-
Temperature Coefficient	ppm/K	-	-36	-

(1). Temperature range -20°C to +85°C

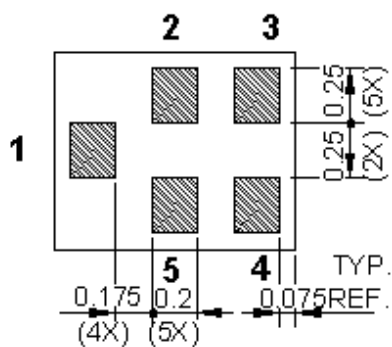
C. OUTLINE DRAWING:



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

1 to 5 : Pin No.

Unit : mm

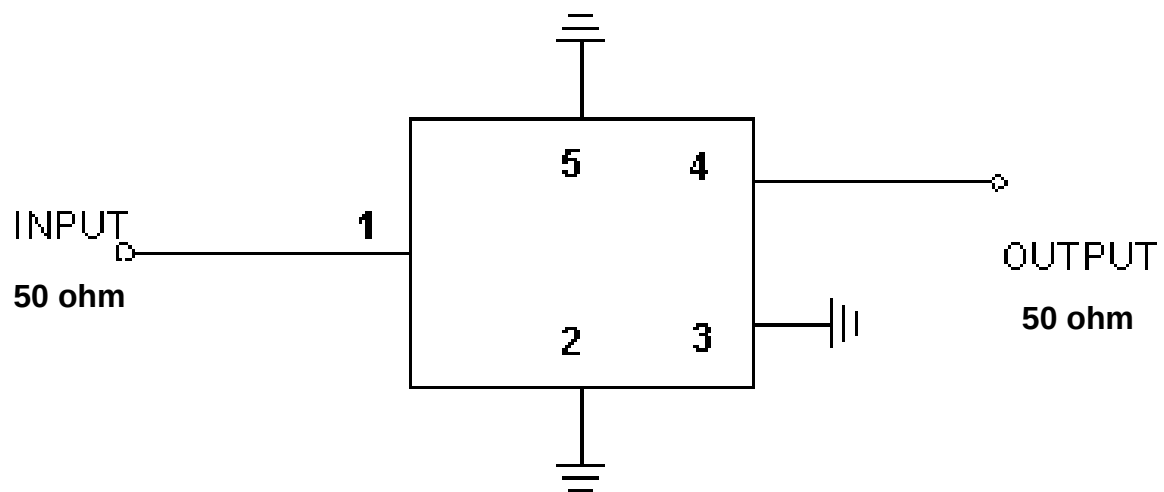


Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

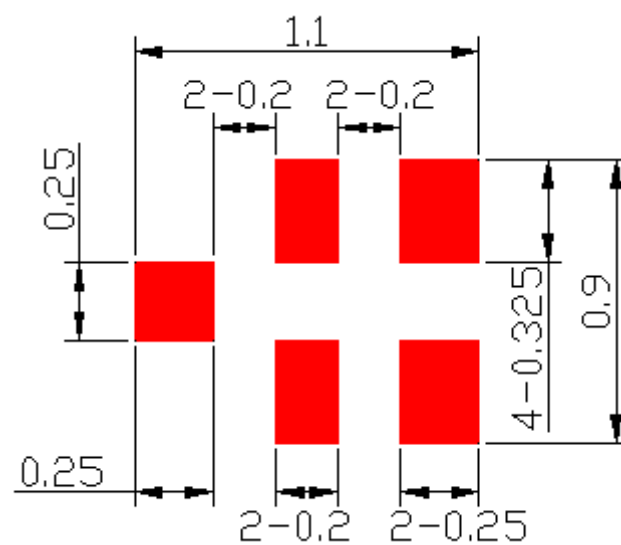
□ : Year/Month Code (Follow the table)

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>

D. MEASUREMENT CIRCUIT:



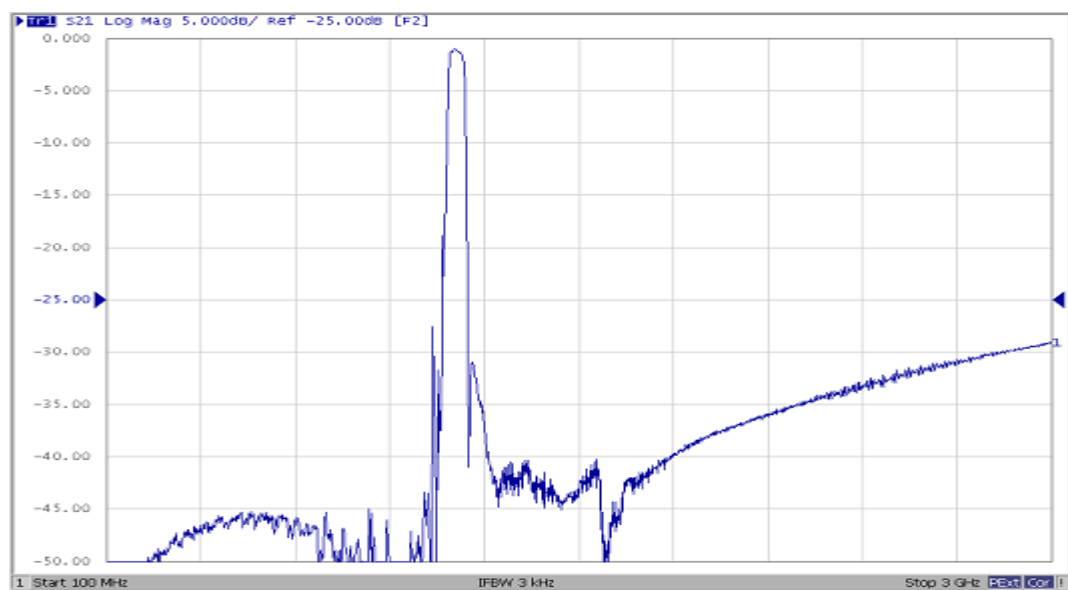
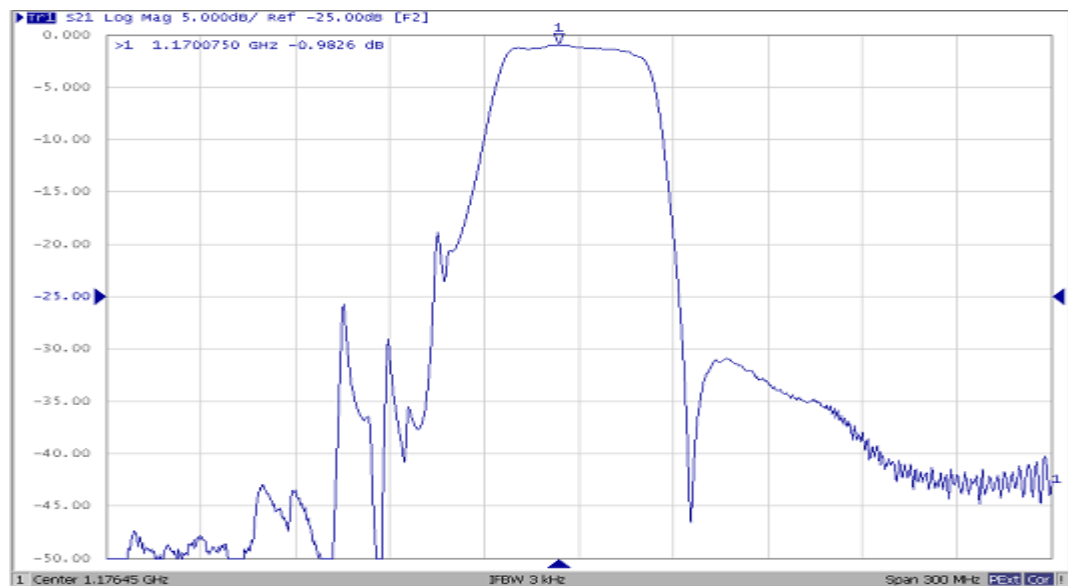
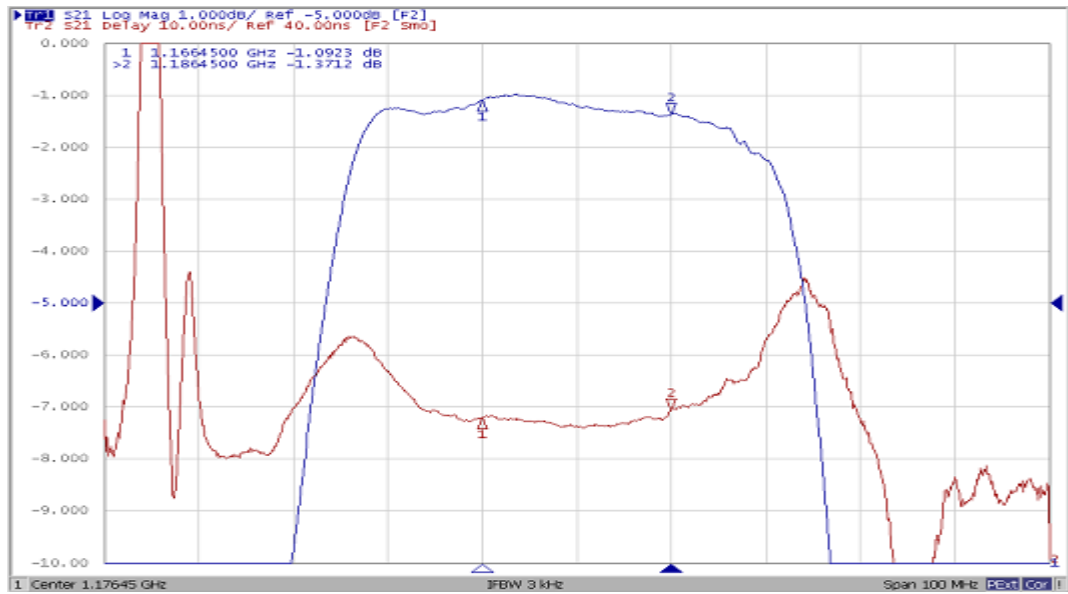
E. PCB Footprint :

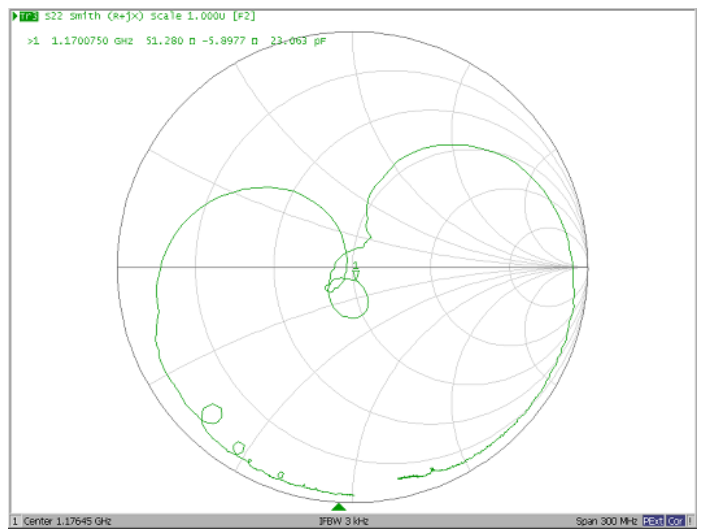
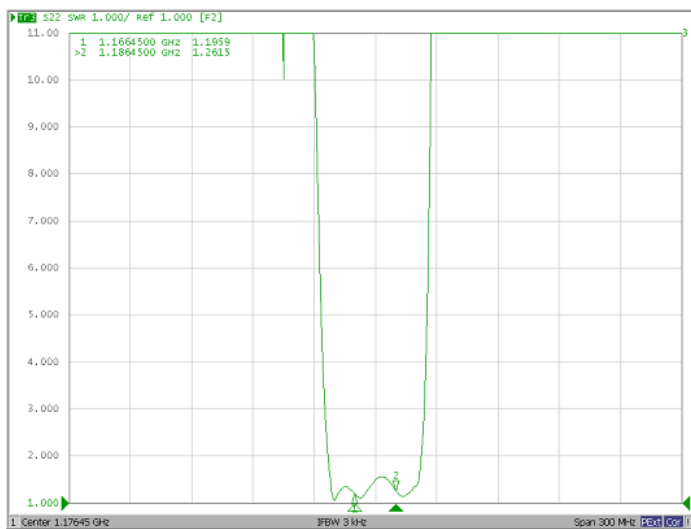
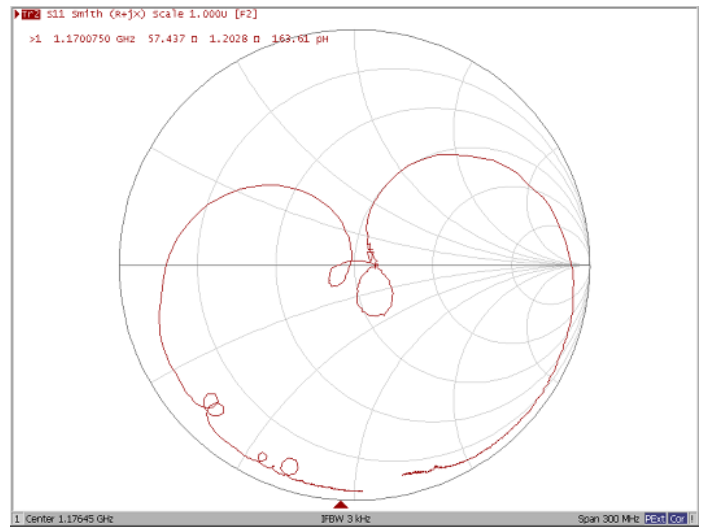
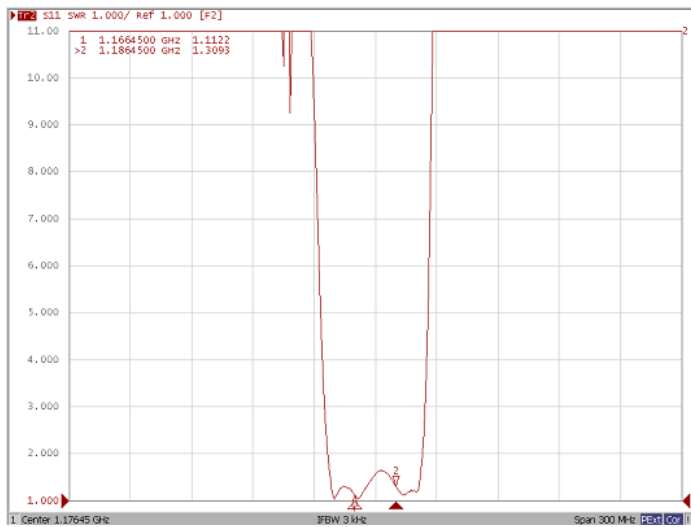


 : Land Pattern

Unit: mm

F. Frequency Characteristics:

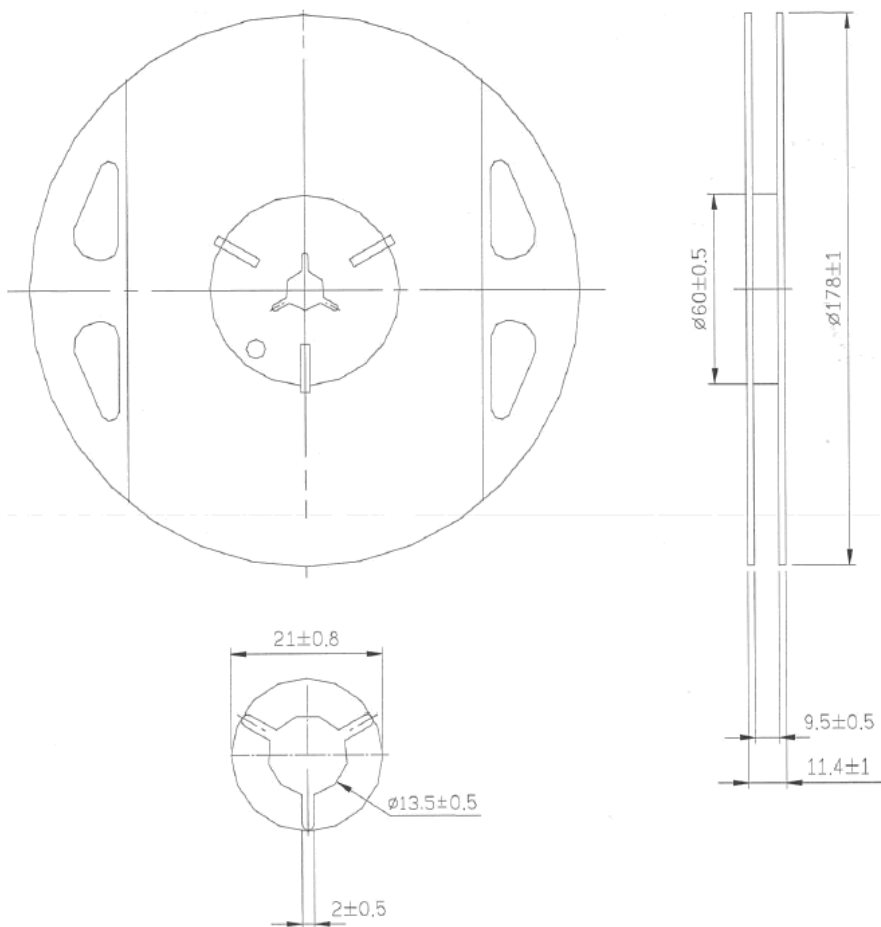




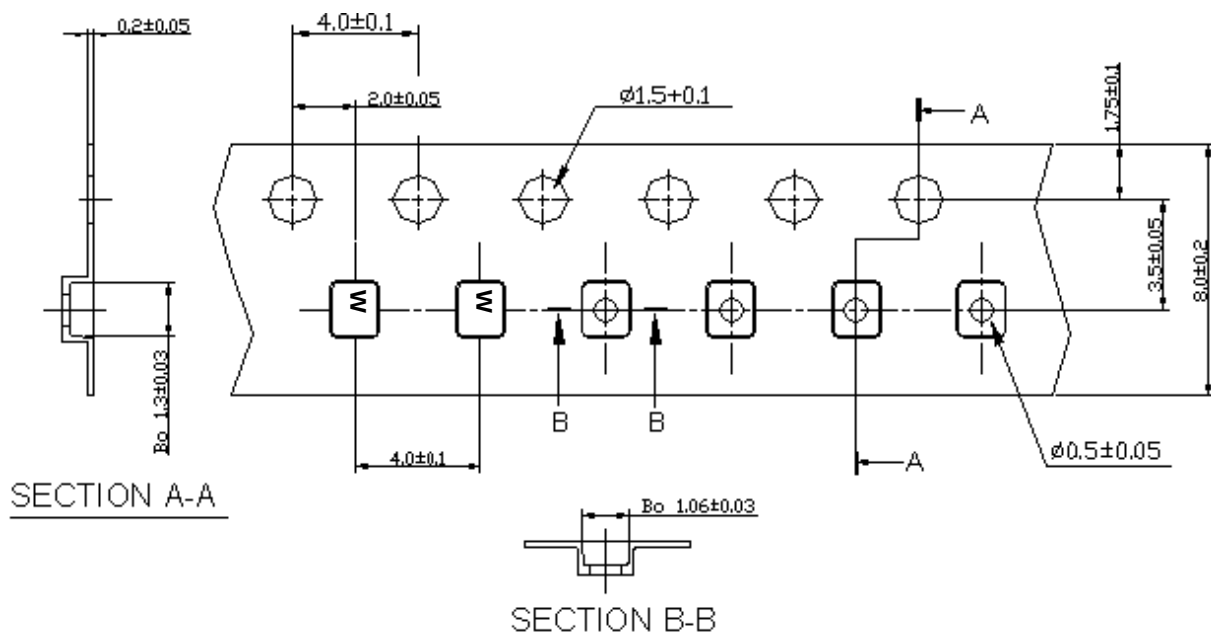
G. PACKING:

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



Direction of Feed



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.

