



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

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Product Specifications Approval Sheet

Product Description: SAW Rx Filter 942.5 MHz LTE Band 8 SMD 1.1x0.9 mm (BW=35 MHz)

TST Part No.: TA1839DA

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee *Kazuma Lee*

Approved 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 942.5 MHz

MODEL NO.:TA1839DA

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage: 3 V
3. Operating Temperature: -20 °C to +85 °C
4. Storage Temperature Range: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 3 (MSL 3)



Electrostatic Sensitive Device (ESD)

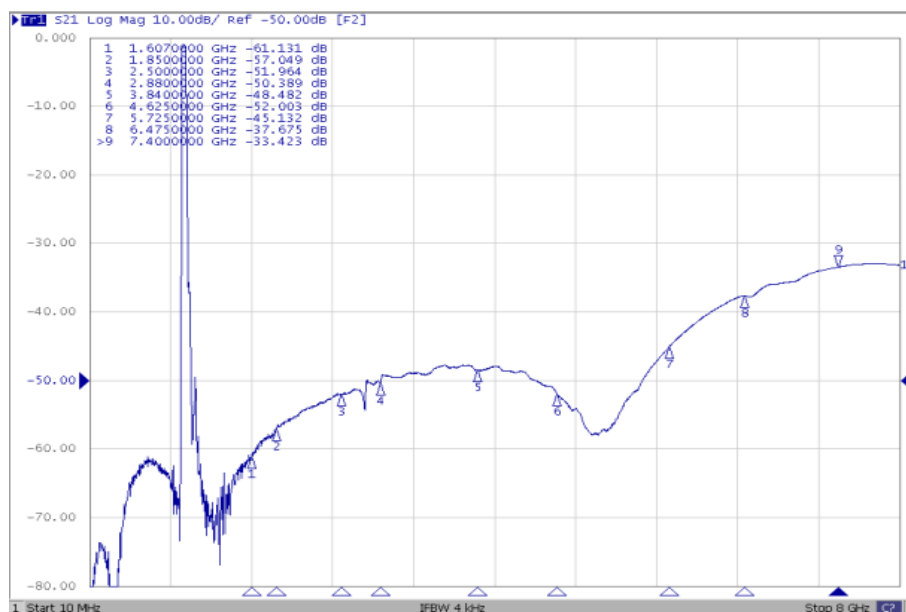
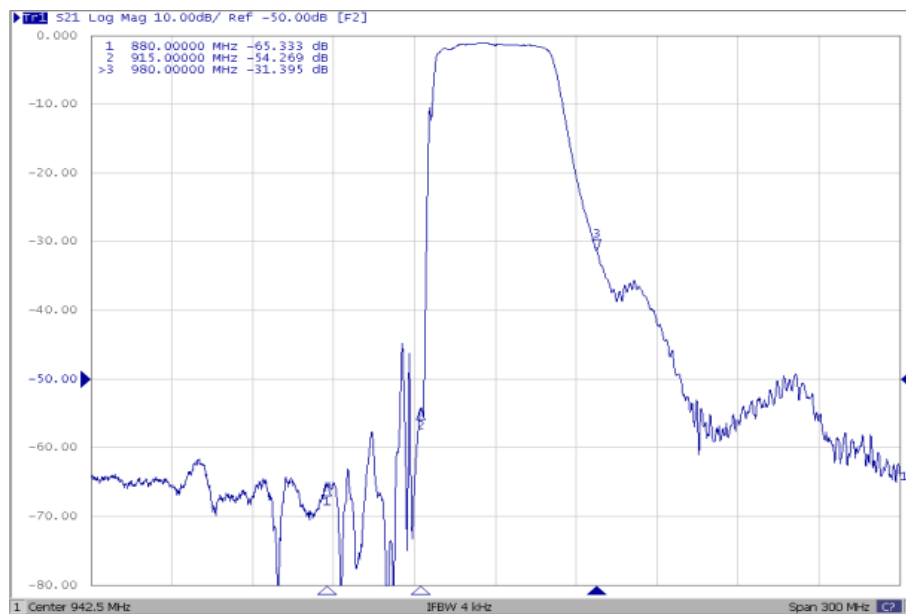
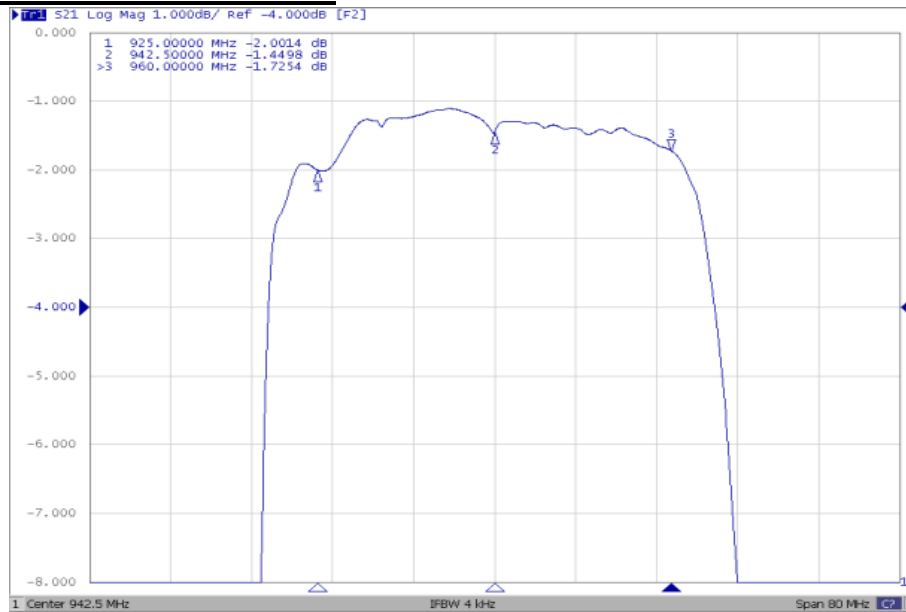
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance: $Z_s = 50//33\text{nH } \Omega$ (Single-ended)

Terminating load impedance: $Z_L = 50//33\text{nH } \Omega$ (Single-ended)

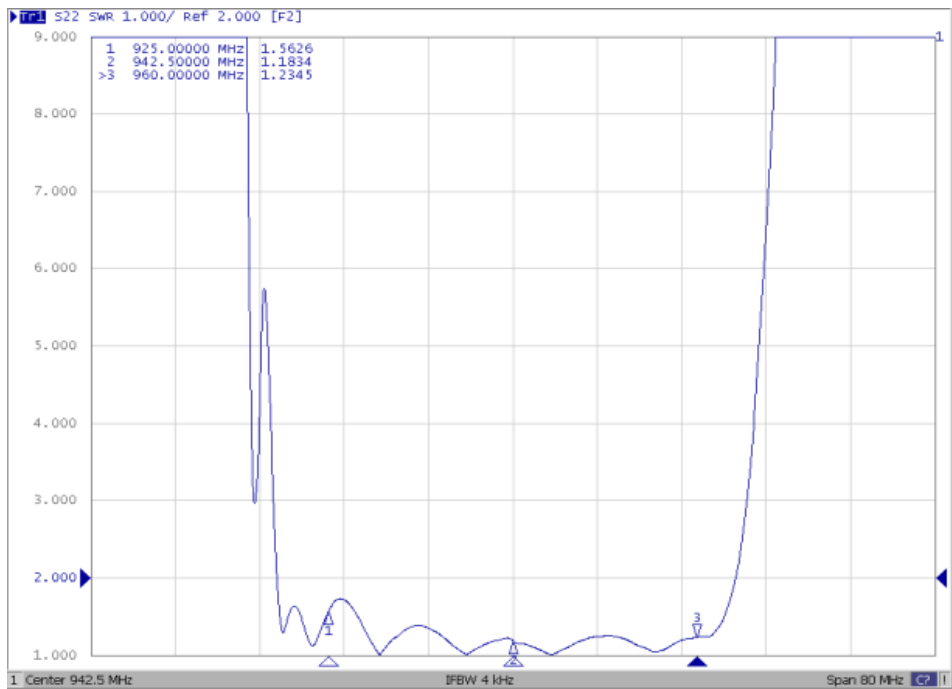
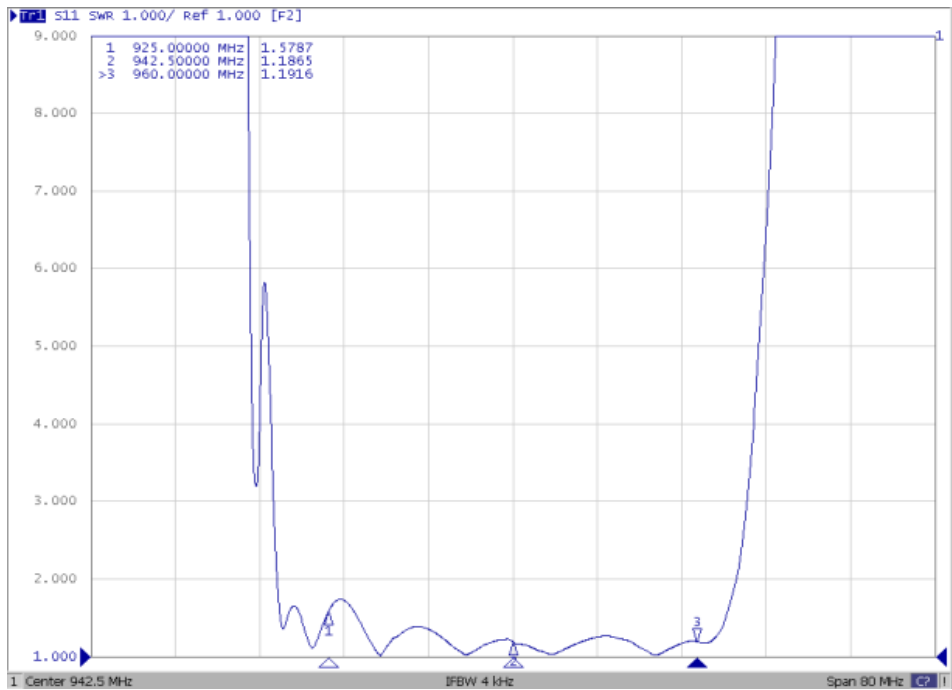
Item	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	942.5	-
Insertion Loss (925 ~ 960 MHz) IL	dB	-	2.0	3.2
Amplitude Ripple (925 ~ 960 MHz)	dB _{p-p}	-	0.9	2.3
VSWR (925 ~ 960 MHz)	-	-	1.8	2.1
Attenuation (Reference level from 0 dB)				
880 ~ 915 MHz	dB	35	47	-
980 ~ 1558 MHz	dB	23	31	-
1559 ~ 1607 MHz	dB	40	60	-
1850 ~ 1920 MHz	dB	40	56	-
2400 ~ 2500 MHz	dB	35	51	-
2775 ~ 2880 MHz	dB	35	50	-
3700 ~ 3840 MHz	dB	32	47	-
4625 ~ 4800 MHz	dB	32	52	-
4900 ~ 5950 MHz	dB	30	42	-
5550 ~ 5725 MHz	dB	30	45	-
6475 ~ 6720 MHz	dB	30	36	-
7400 ~ 7680 MHz	dB	20	33	-

C. FREQUENCY CHARACTERISTIC:

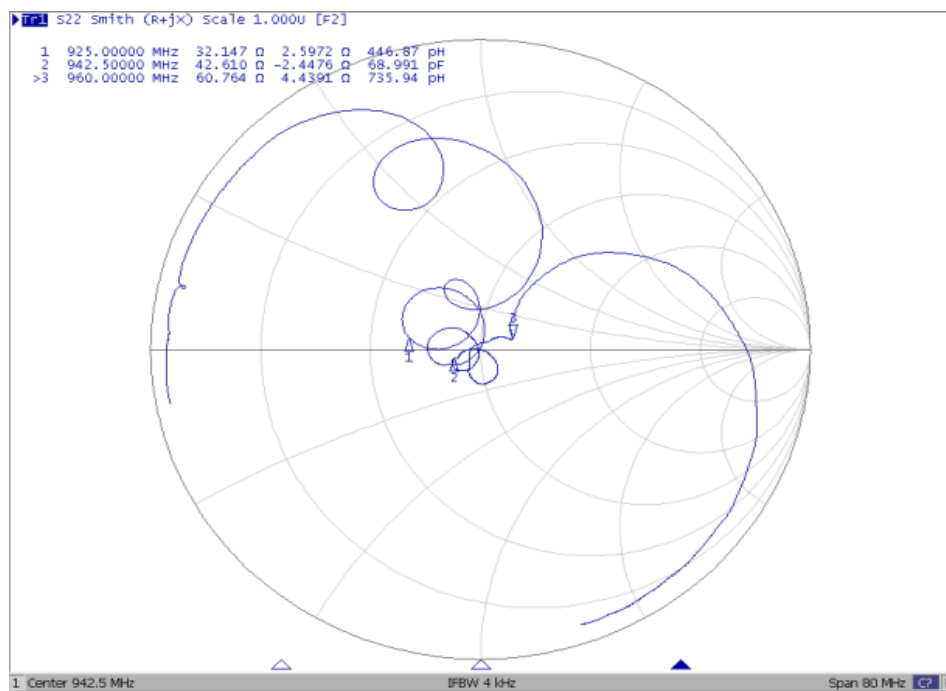
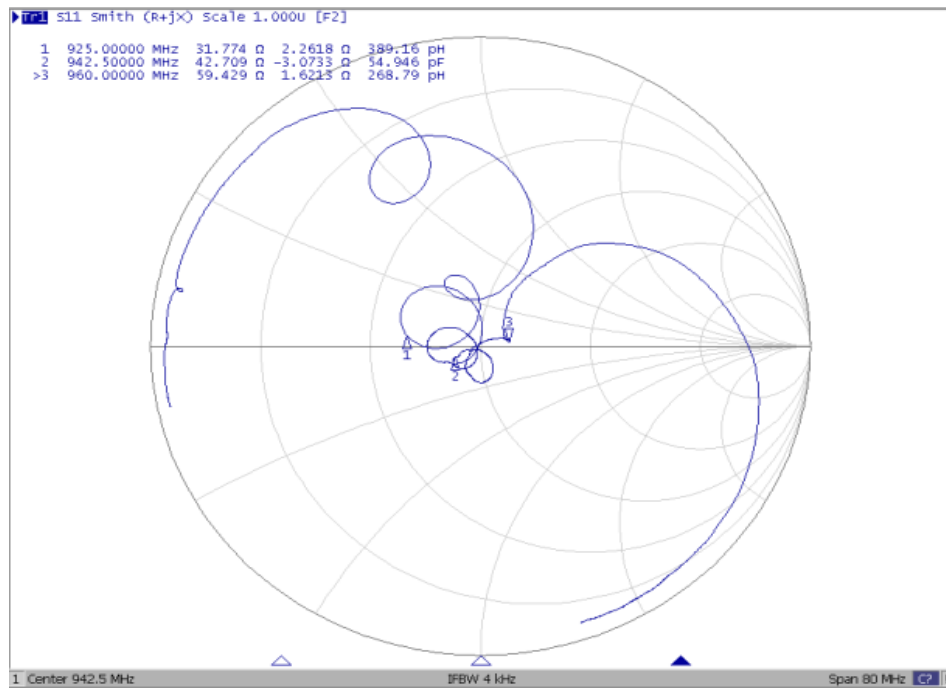


Reflection Functions:

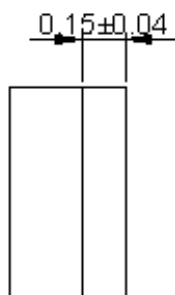
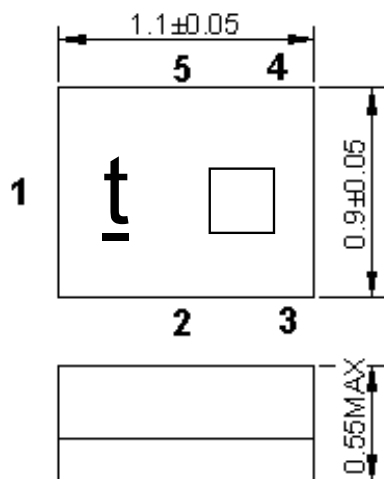
VSWR



Smith Chart



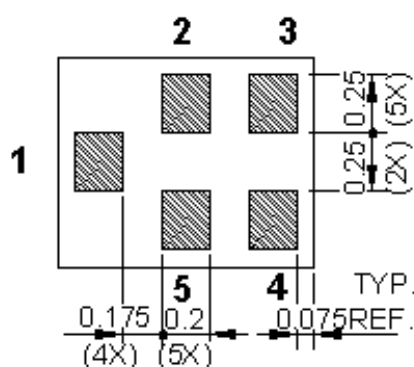
D.OUTLINE DRAWING:



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

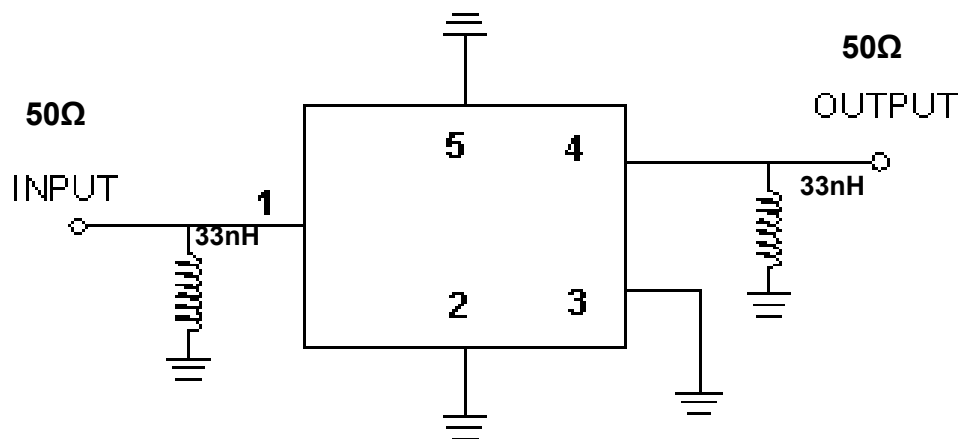
Marking description:

t : part symbol (small letter)

□: Year/Month Code

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>j</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. MEASUREMENT CIRCUIT:

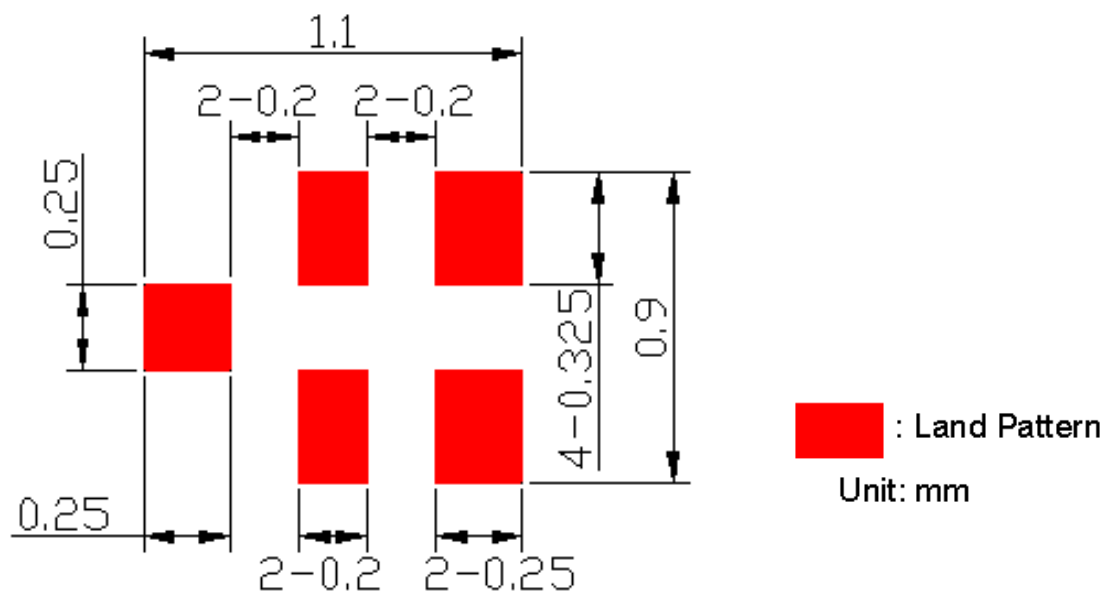


(1): Unbalance Port

(4): Unbalance Port

Others: Ground

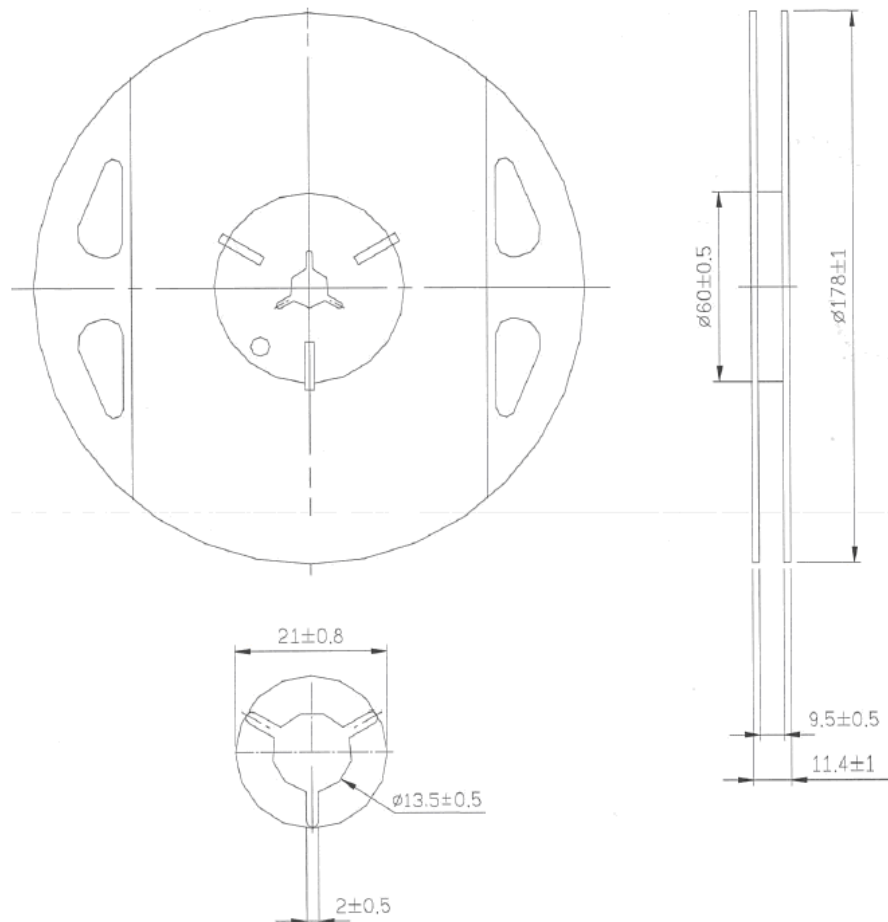
F. PCB Footprint:



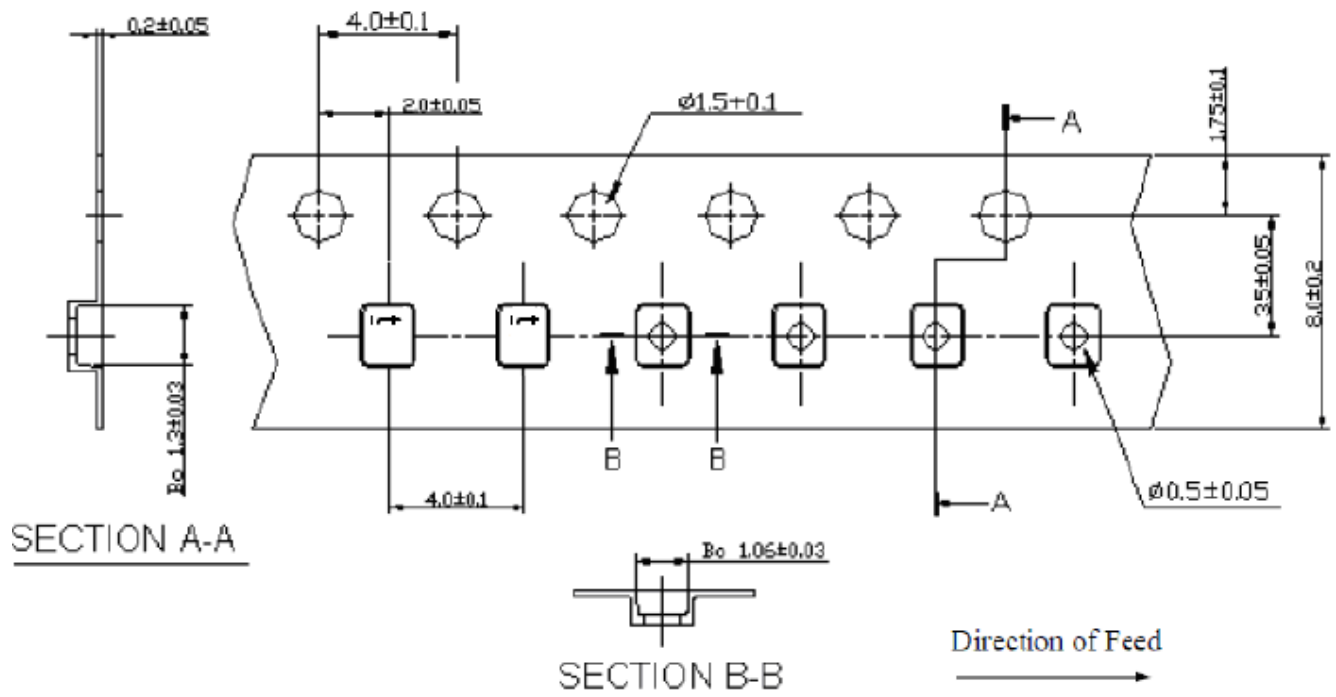
G PACKING: (Ref: WI-75M03)

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 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

