



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 Description: SAW Filter 1582.47 MHz GPS+GLONASS+Compass

SMD 1.4 X1.1 mm (BW=46.84 MHz)

TST Part No.: TA2411A (This part is compliant by AEC-Q200)

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/05/02

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.



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

SAW Filter 1582.47 MHz

MODEL NO.:TA2411A

REV. NO.:3.0

A. MAXIMUM RATING:

1. Maximum Input Power: 15 dBm
2. Maximum DC Voltage: +/-5 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -55 °C to +125 °C
5. Moisture Sensitivity Level: Level 3 (MSL 3)
6. ESD: 50V(MM), 100V(HBM)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance: $Z_s = 50 \Omega$ (Single-ended)

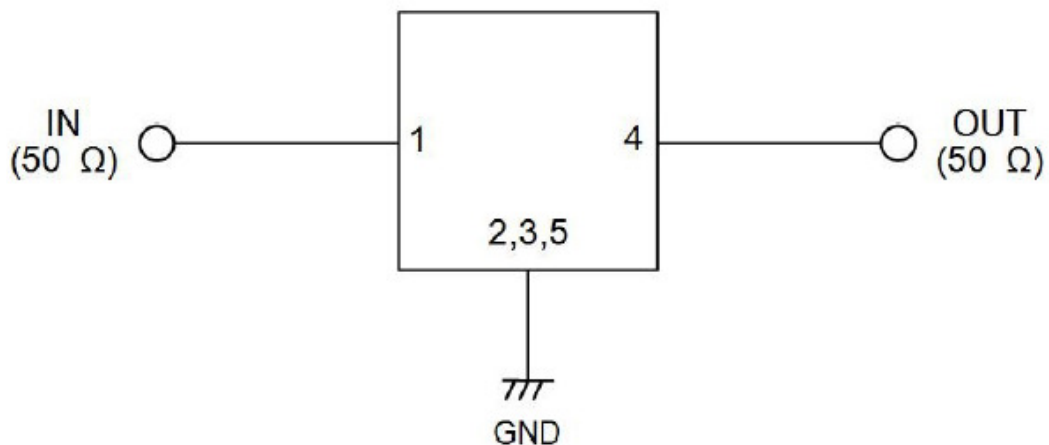
Terminating load impedance: $Z_L = 50 \Omega$ (Single-ended)

Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency Fc		MHz	-	1582.47	-
Insertion Loss	1574.42 ~ 1576.42 MHz	dB		1.2	1.7
	1597.55 ~ 1605.89 MHz	dB		1.8	2.5
	1559.05 ~ 1563.14 MHz	dB		1.7	2.5
Amplitude Ripple	1574.42 ~ 1576.42 MHz	dB _{p-p}		0.1	0.8
	1597.55 ~ 1605.89 MHz	dB _{p-p}		0.55	1.4
	1559.05 ~ 1563.14 MHz	dB _{p-p}		0.2	1.2
Group Delay Ripple	1574.42 ~ 1576.42 MHz	nsec		1.0	6.0
	1597.55 ~ 1605.89 MHz	nsec		4.0	12.5
	1559.05 ~ 1563.14 MHz	nsec		5.0	16.0
VSWR(Input/Output)	1574.42 ~ 1576.42 MHz	-		1.5	2.1
	1597.55 ~ 1605.89 MHz	-		1.4	2.0
	1559.05 ~ 1563.14 MHz	-		1.5	2.0

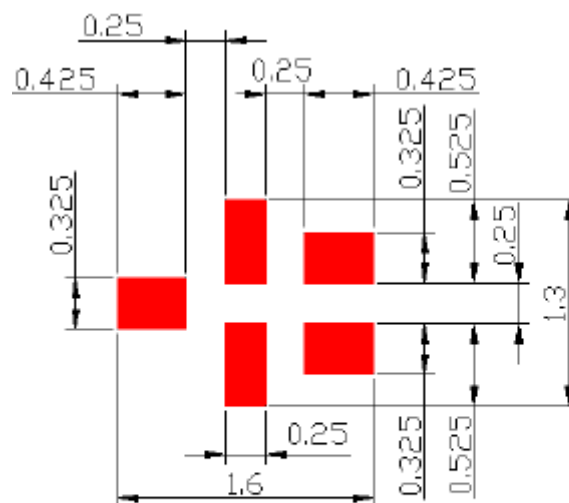
Attenuation (Reference level from 0 dB)				
699~716 MHz	dB	43	47	-
777~787 MHz	dB	45	46.5	-
814~849 MHz	dB	45	46.5	-
880~915 MHz	dB	45	46.5	-
1427.9~1446.9 MHz	dB	45	53	-
1447.9~1462.9 MHz	dB	45	54	-
1710~1785 MHz	dB	47	54	-
1850~1915 MHz	dB	47	54	-
1920~1980 MHz	dB	47	54	-
2400~2500 MHz	dB	45	50	-
2500~2570 MHz	dB	45	50	-

Notes: (1) No Matching Network.

C. MEASUREMENT CIRCUIT:

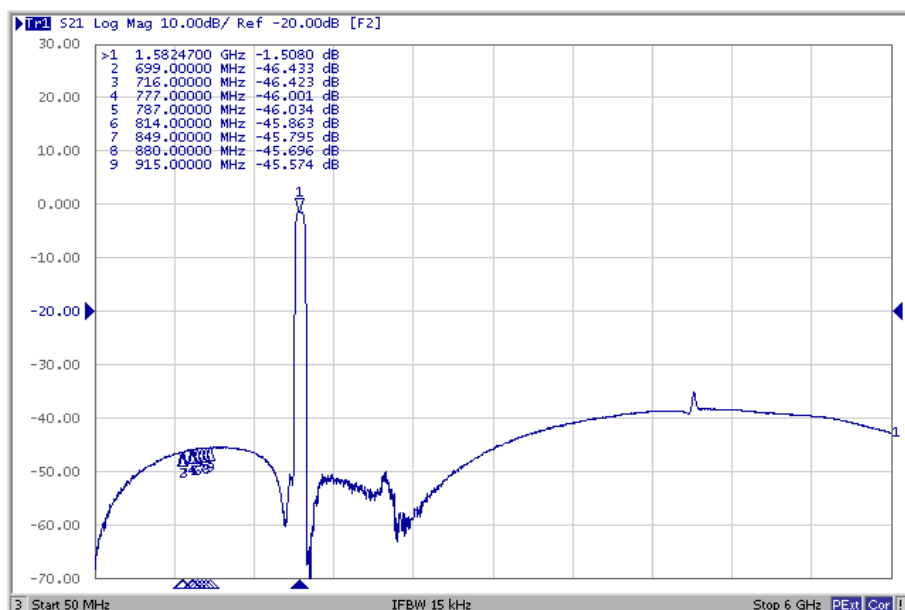
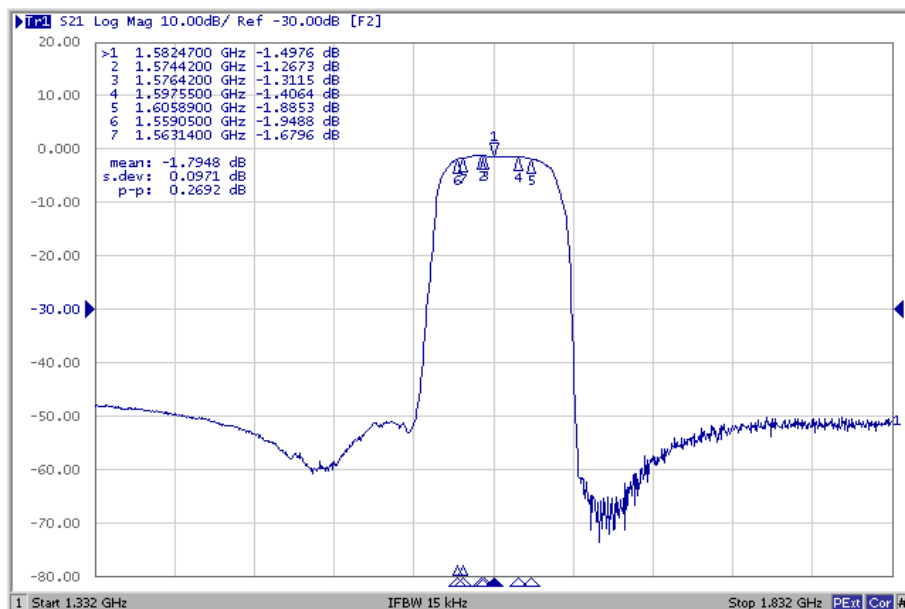
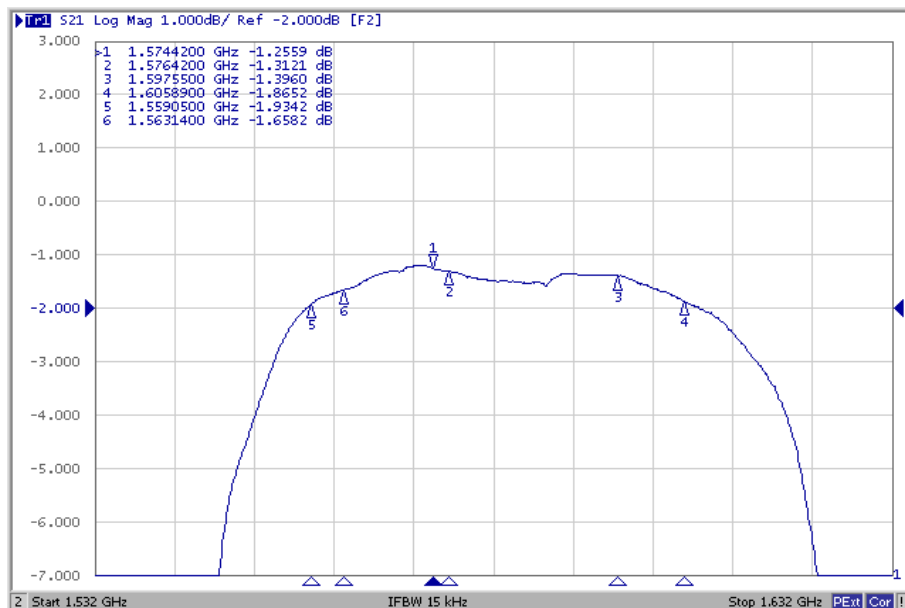


D. PCB Footprint:

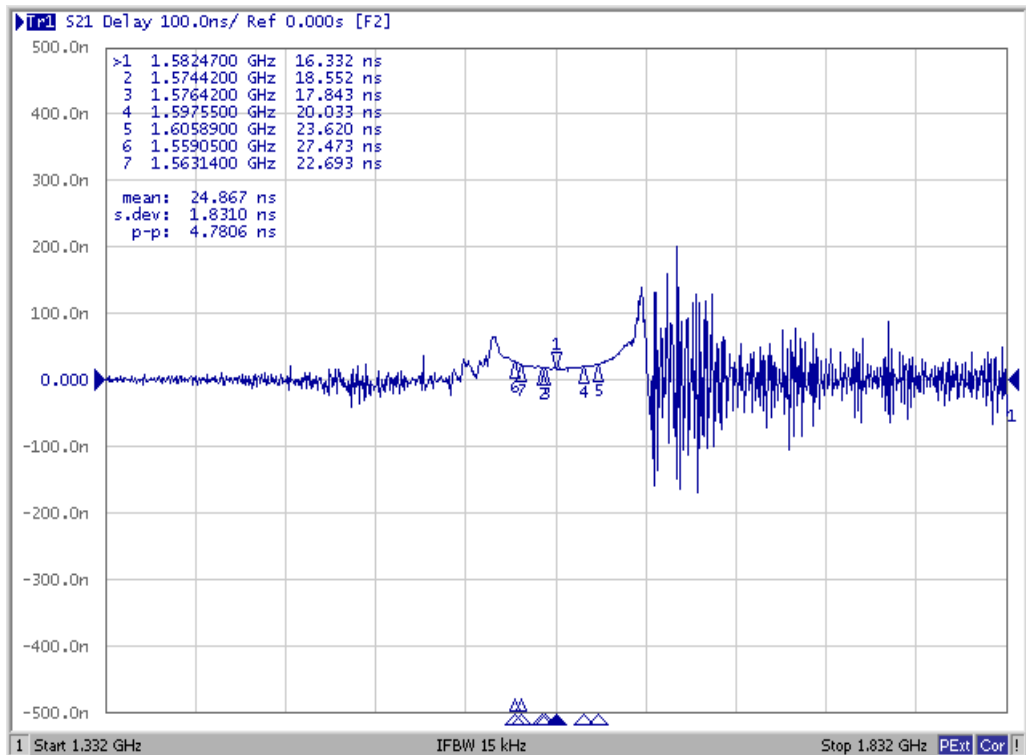


: Land Pattern
Unit : mm

E. FREQUENCY CHARACTERISTIC:

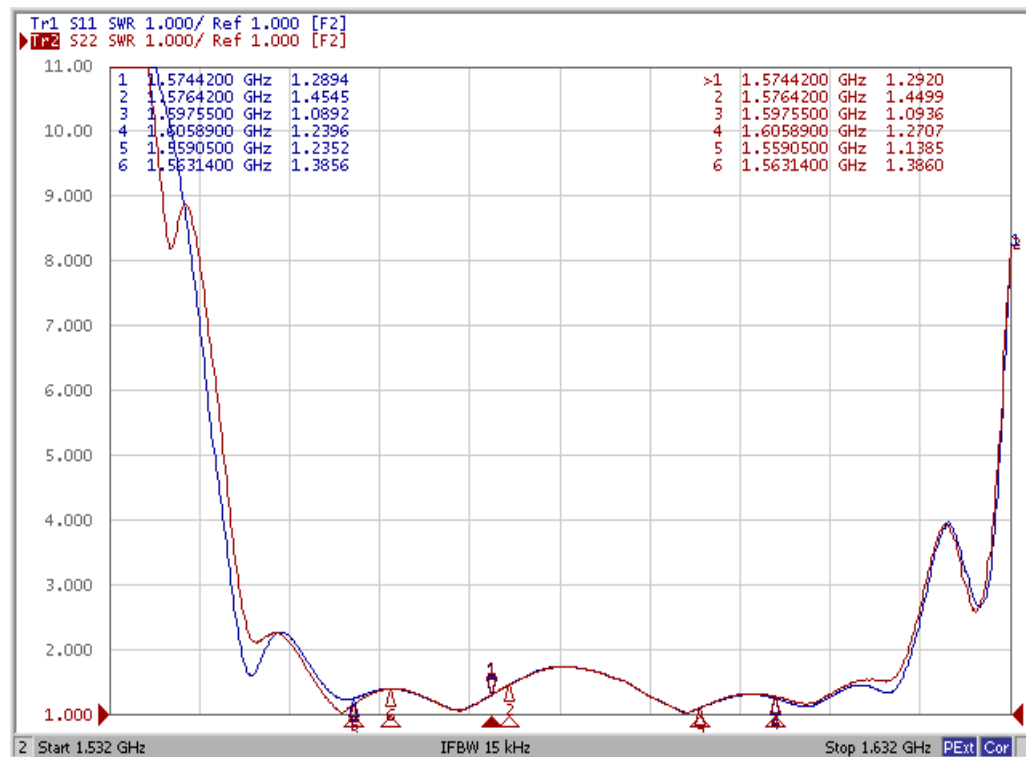


Group Delay Ripple

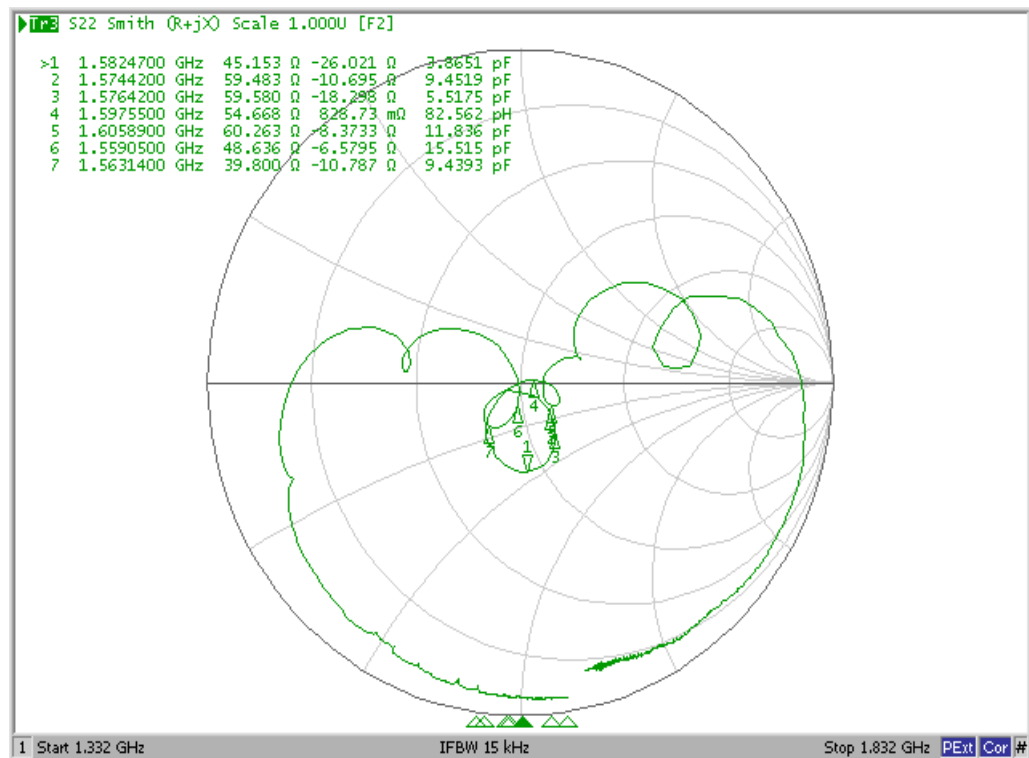
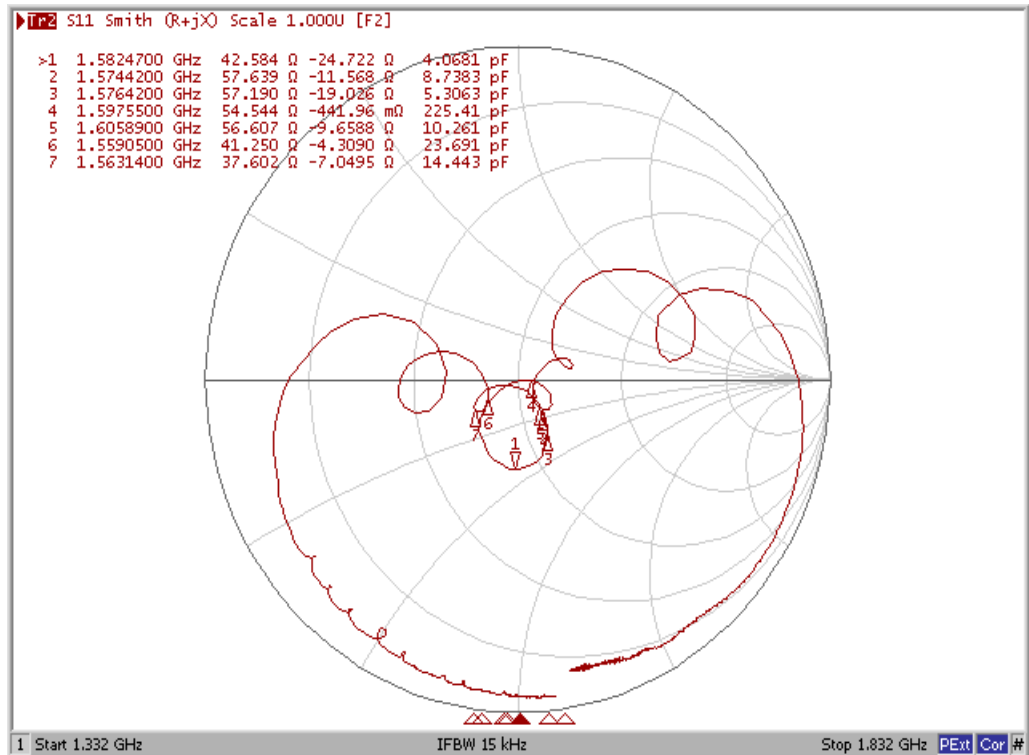


Reflection Functions:

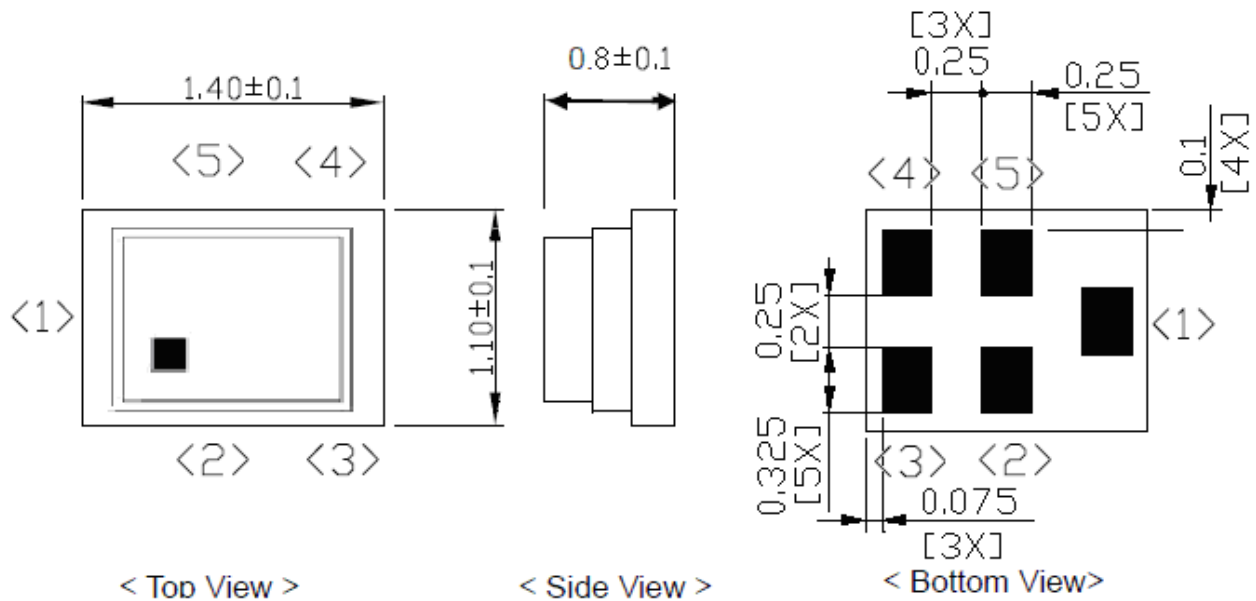
VSWR



Smith Chart



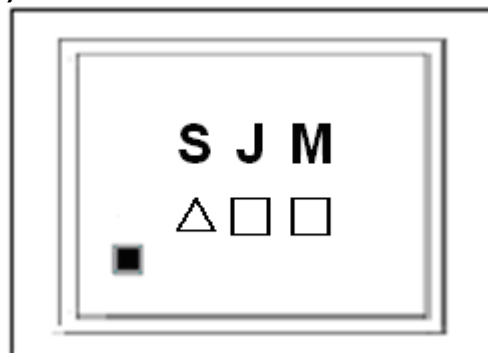
F. OUTLINE DRAWING:



Pin Configuration

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

Top View (Mass Production):



Δ : Date Code

$\square$: Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

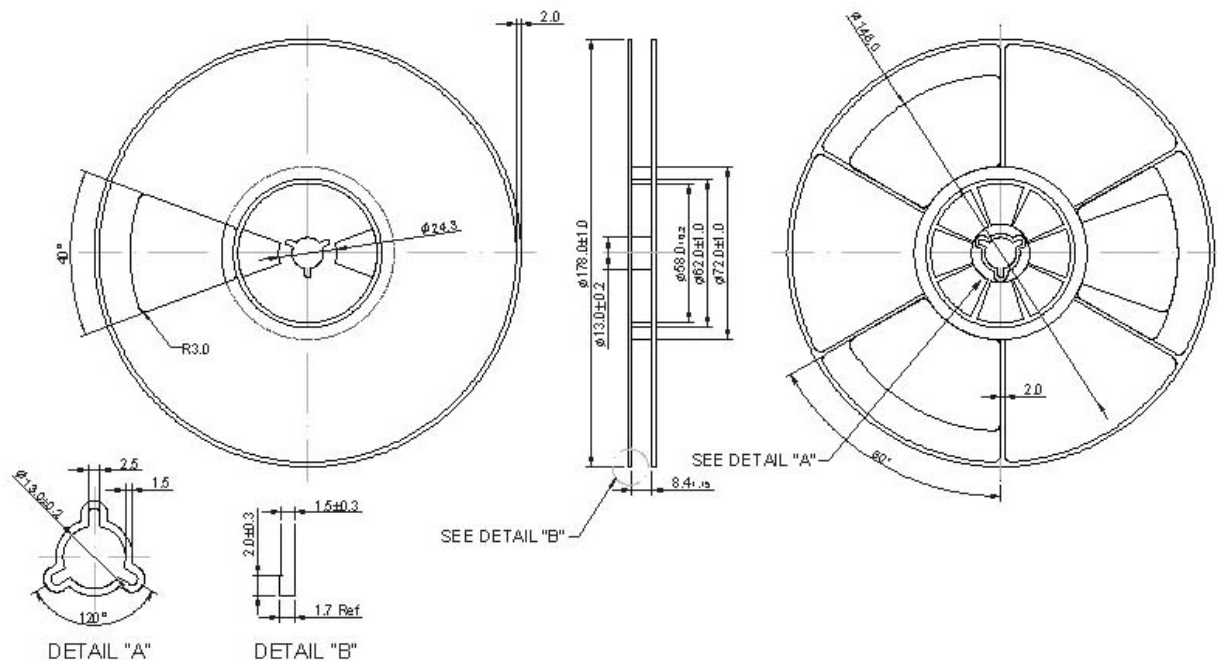
Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

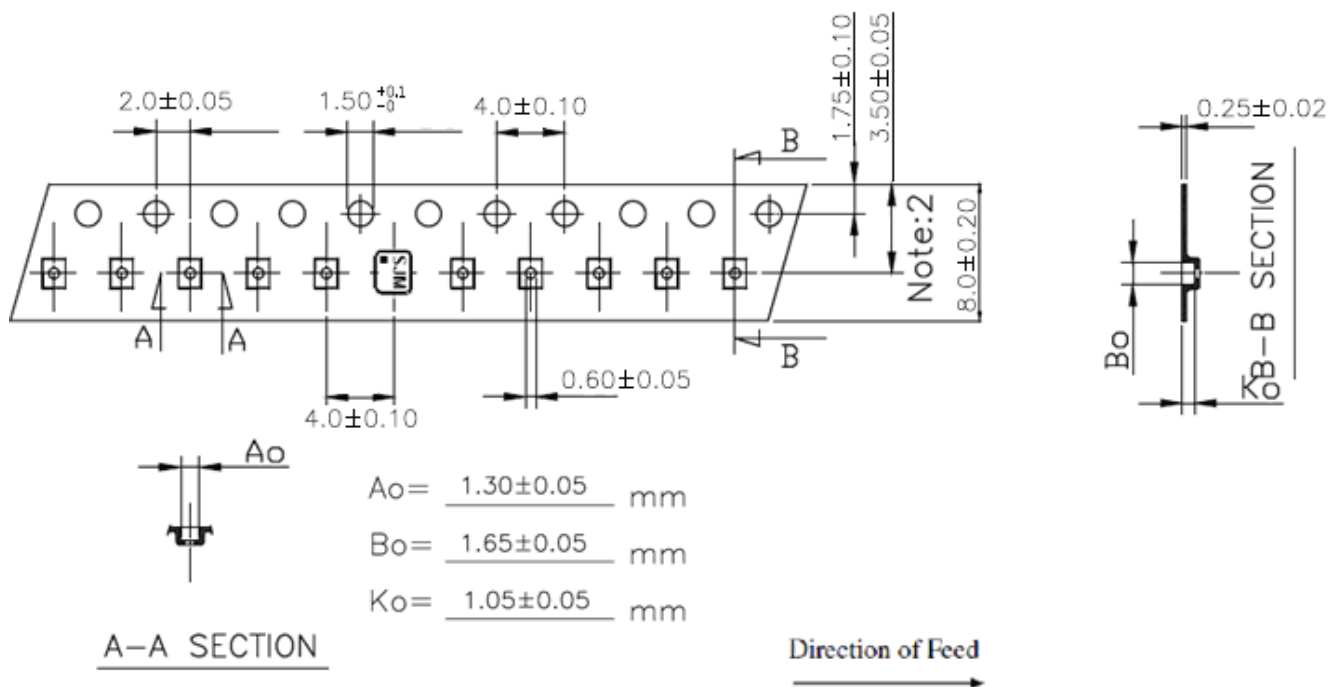
G. PACKING: (Ref: WI-75M03)

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. RECOMMENDED TEMPERATURE PROFILE OF REFLOW SOLDERING:

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.

