



TAI-SAW TECHNOLOGY CO., LTD.

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

Product Description: RF SAW Filter 2442 MHz Size 1.1x0.9 BW 79MHz

TST Part No.: TA2530B (This part is compliant with AEC-Q200)

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Nina Chen *Nina Chen*

Approved by: _____ Kazuma Lee *Kazuma Lee*

Date: _____ 2022/12/09

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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RF SAW Filter 2442 MHz Size 1.1x0.9 BW 79MHz

MODEL NO.:TA2530B

REV. NO.:3

A. Maximum Rating:

1. Input Power Level : 25dBm (2402.5~2481.5MHz) (Ta=+50deg C,5000h)
2. DC Voltage : 5V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -55°C to +125°C
5. Moisture Sensitivity Level: Level 3
- 6 .ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. Electrical Characteristics:

Terminating source impedance : $Z_s = 50 \parallel 8.2\text{nH} \ \Omega$ (Single-ended)

Terminating load impedance : $Z_L = 50 \parallel 6.2\text{nH} \ \Omega$ (Single-ended)

Item	Unit	Min.	Typ.	Max.	Note
Center Frequency F_c	MHz	-	2442		
Insertion Loss (2402.5~2421.5MHz) IL	dB(*1)(*2)	-	1.1	2.2	CH1
Insertion Loss (2407.5~2471.5MHz) IL	dB(*1)(*2)	-	1.0	1.9	CH2 to 11
Insertion Loss (2457.5~2476.5MHz) IL	dB(*1)(*2)	-	1.1	1.8	CH12
Insertion Loss (2462.5~2481.5MHz) IL	dB(*1)(*2)	-	1.2	2.0	CH13
Insertion Loss (2402.5~2481.5MHz) IL	dB(*1)(*2)	-	1.2	1.7	+25°C
Amplitude Ripple (2402.5~2481.5MHz)	dB	-	0.8	2.6	Any 19 MHz
Input VSWR (2402.5~2481.5MHz)	-	-	1.3	2.1	
Output VSWR (2402.5~2481.5MHz)	-	-	1.2	2.1	
Attenuation (reference level from 0 dB)					

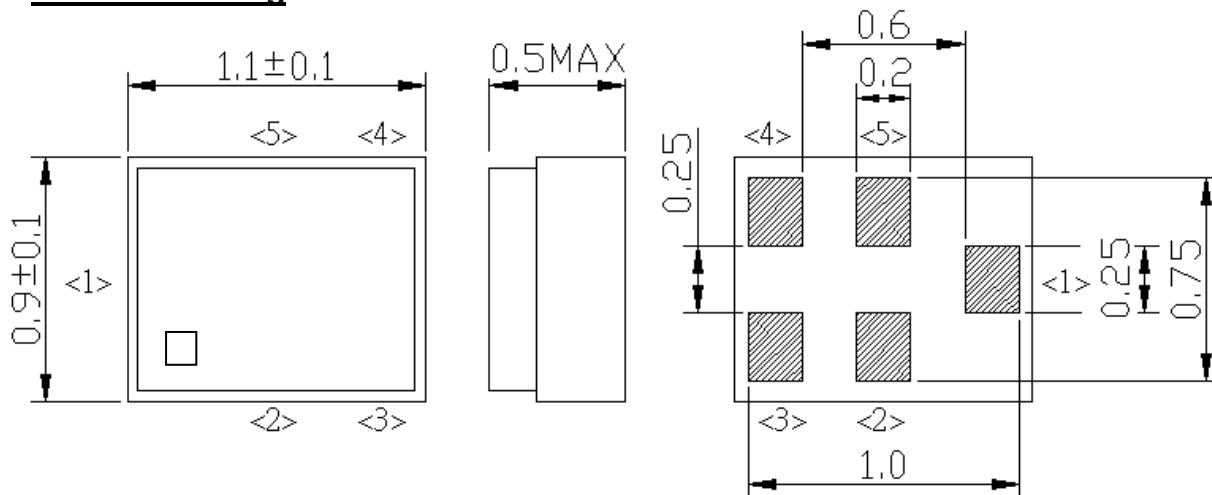
699 ~ 960 MHz	dB	33	37	-	
1425 ~ 2170 MHz	dB	25	28	-	
2300 ~ 2370 MHz	dB(*3)	28	37	-	
2370 ~ 2375 MHz	dB(*3)	10	35	-	
2375 ~ 2380 MHz	dB(*3)	4	22	-	
2500 ~ 2505 MHz	dB(*3)	3	22	-	-30 to+85°C-
	dB(*3)	12	22	-	+25°C
2505 ~ 2510 MHz	dB(*3)	9	35	-	
2510 ~ 2570 MHz	dB(*3)	21	34	-	
2570 ~ 2690 MHz	dB	30	33	-	
2690 ~ 7500 MHz	dB	27	32	-	
4900 ~ 5805 MHz	dB	35	41	-	
7200 ~ 7500 MHz	dB	30	39	-	

(*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. Outline Drawing:



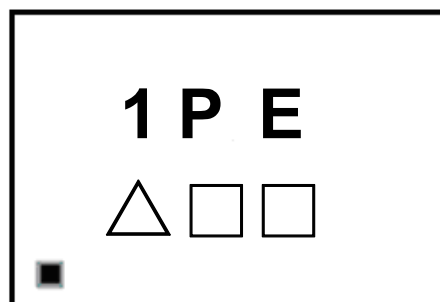
Not Specified Tolerance : +/-0.1 mm

Pin assignment

Pin No.	Pin name	Description
1	In	Input
2	GND	Ground
3	GND	Ground
4	Out	Output
5	GND	Ground

Figure 1. Dimensions and Pin assignment

Top View



Marking name : 1 PE

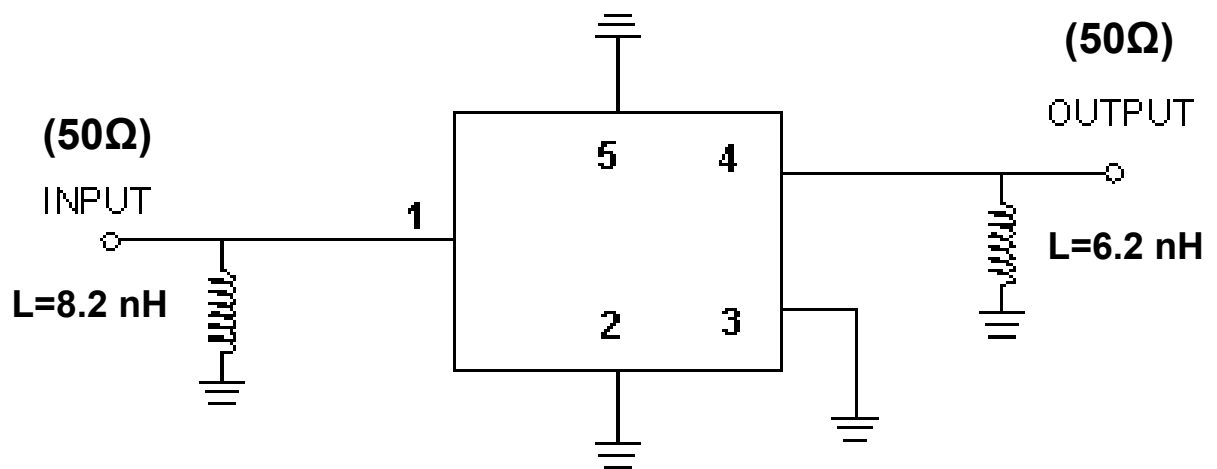
△ : Date Code

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

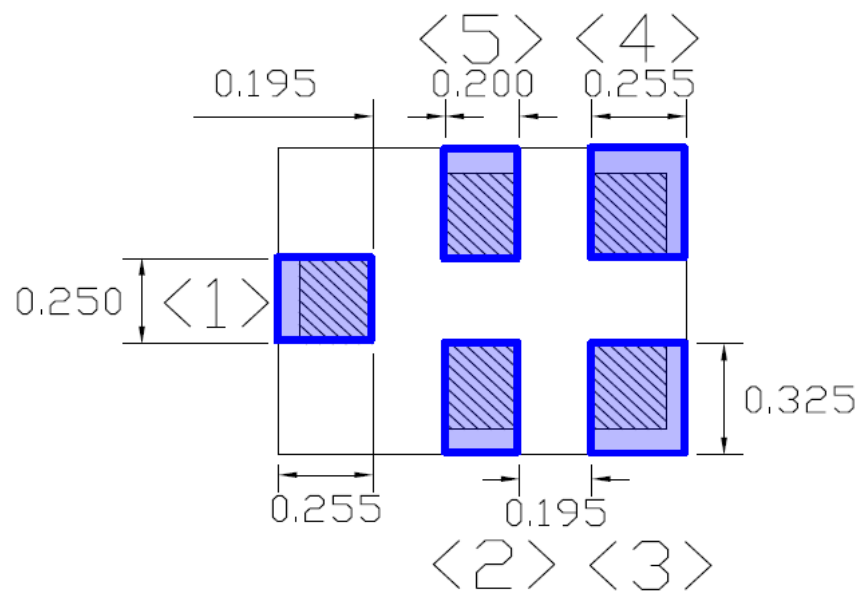
Date Code. Follow below table. (4-year cycle)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2021/2025	A	B	C	D	E	F	G	H	J	K	L	M
2022/2026	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023/2027	a	b	c	d	e	f	g	h	j	k	l	m
2024/2028	n	p	q	r	s	t	u	v	w	x	y	z

D. Measurement Circuit:

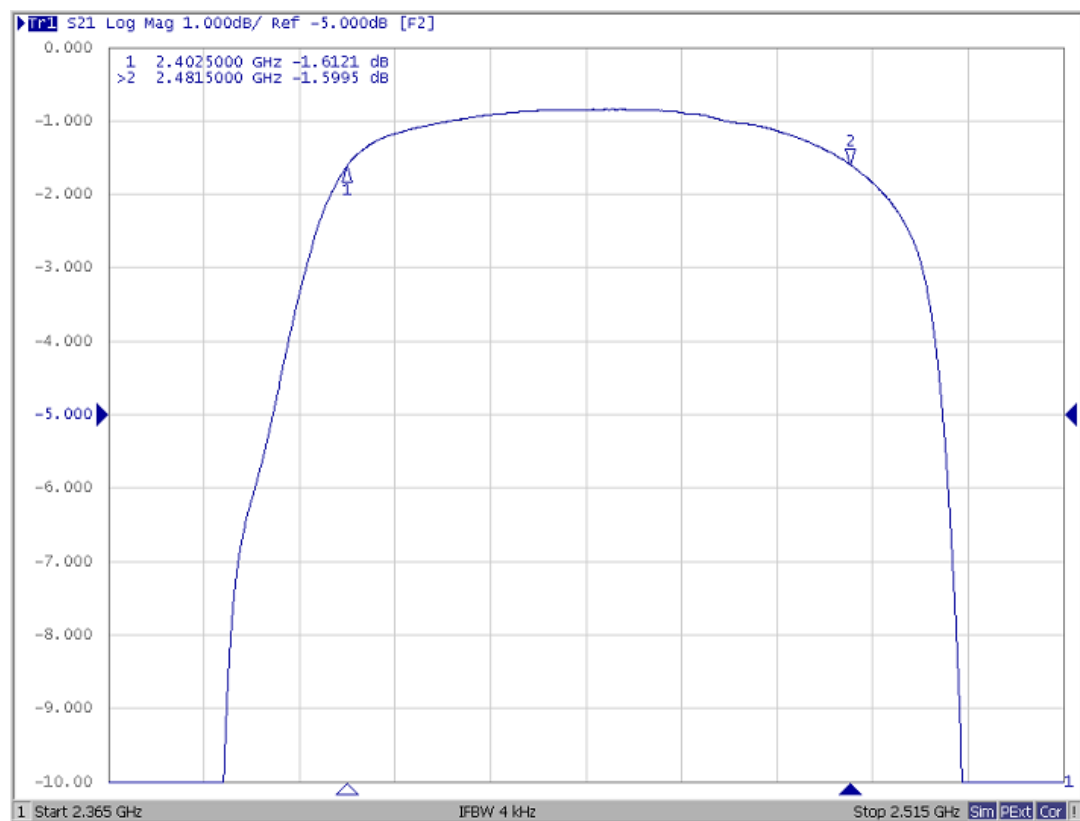
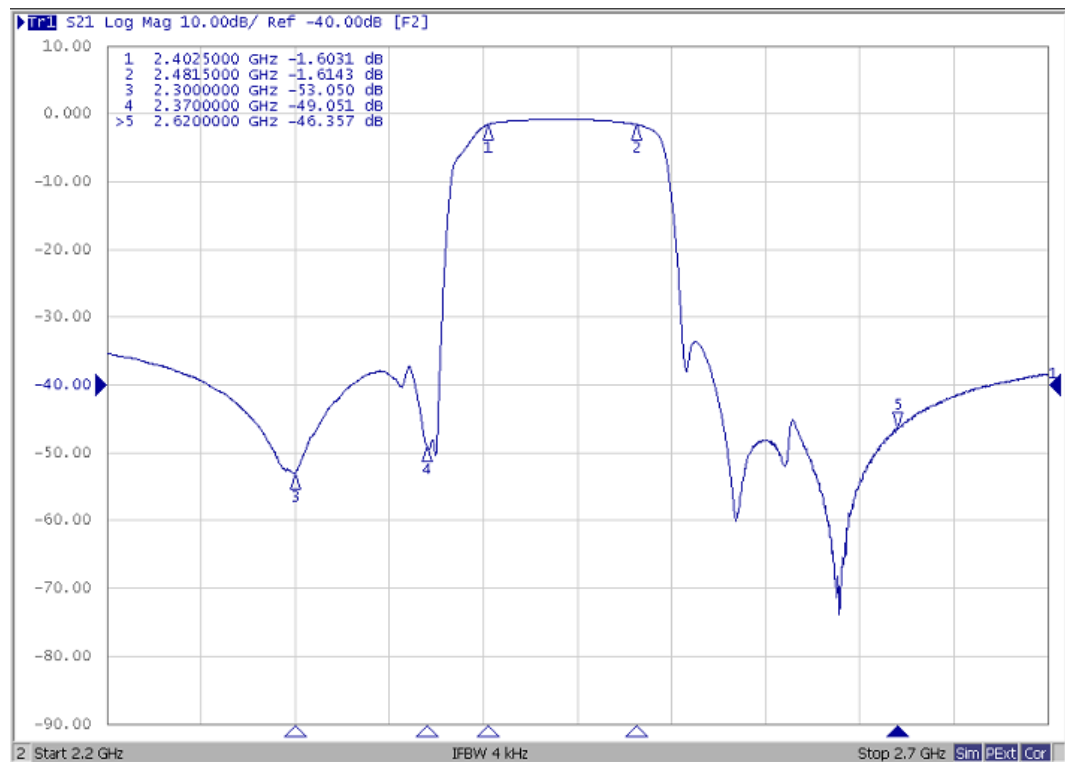


E. PCB Footprint:

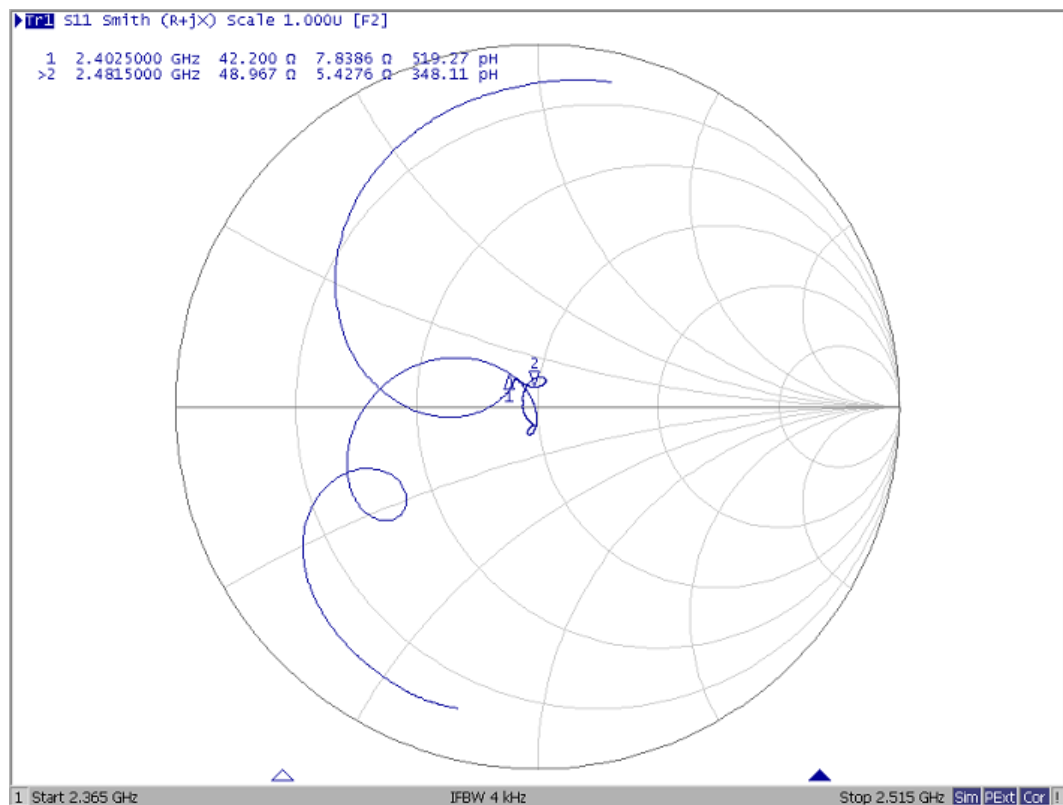
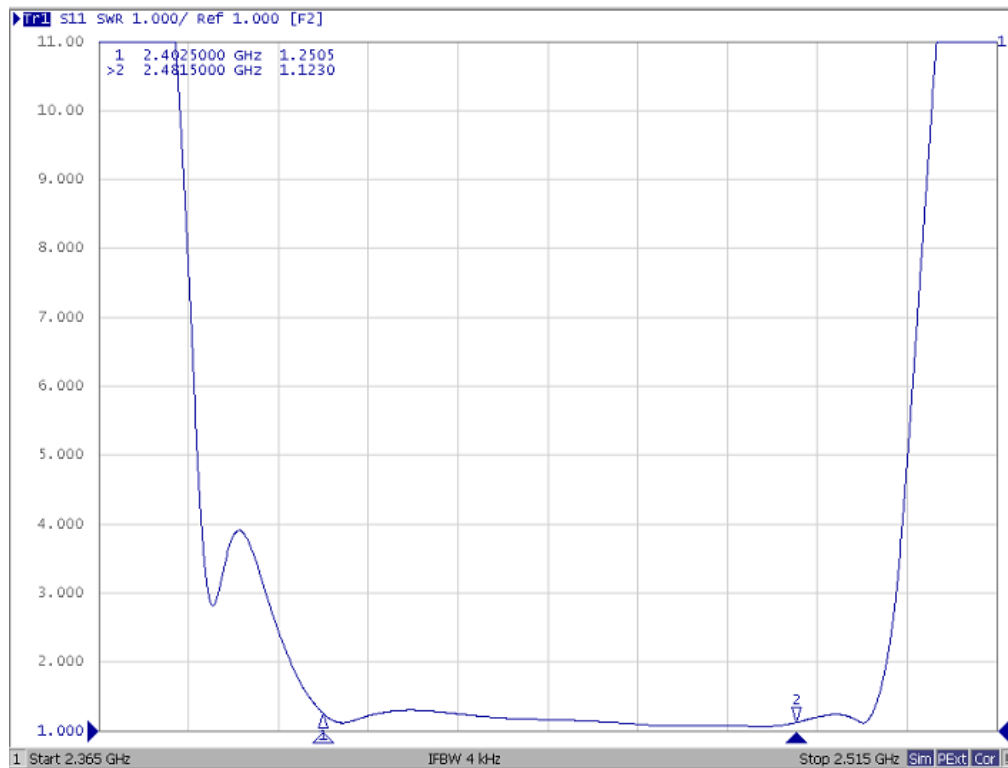


F.Frequency Characteristics:

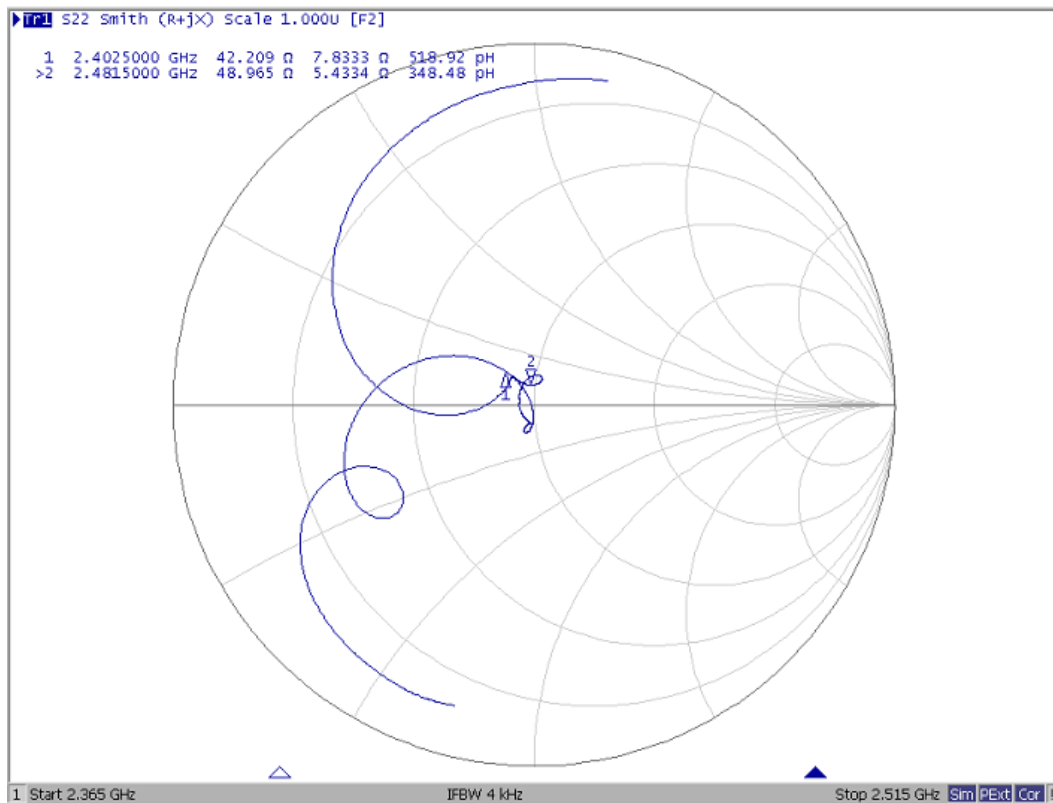
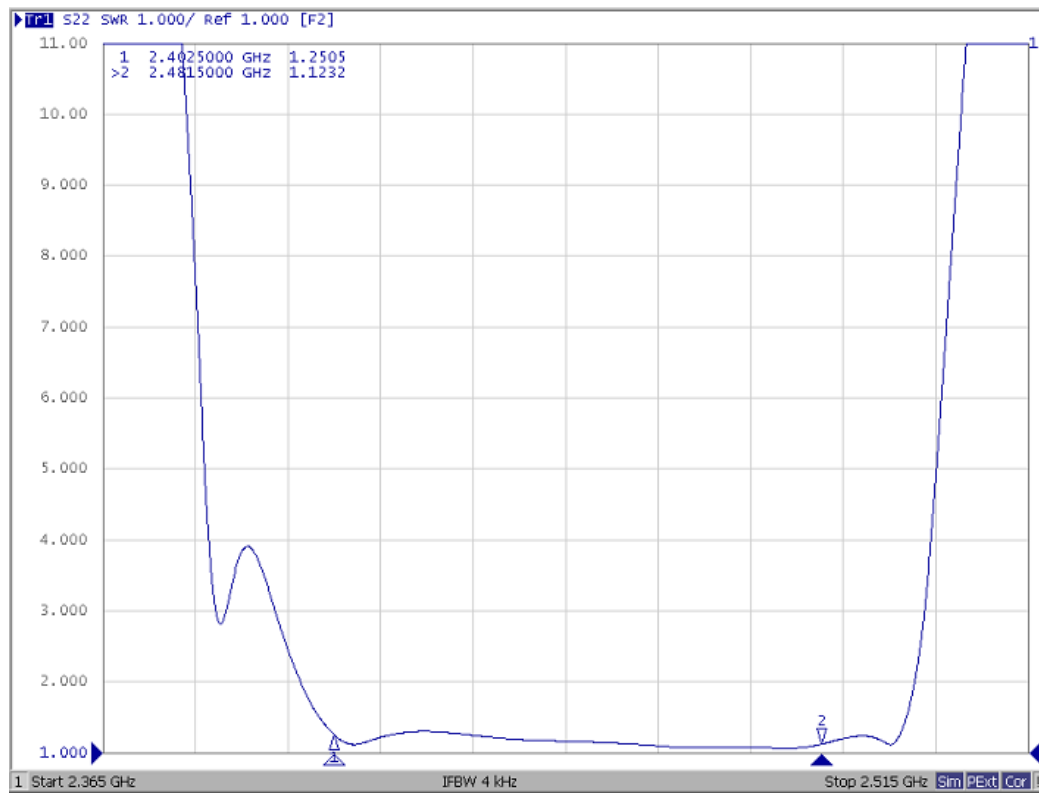
Passband



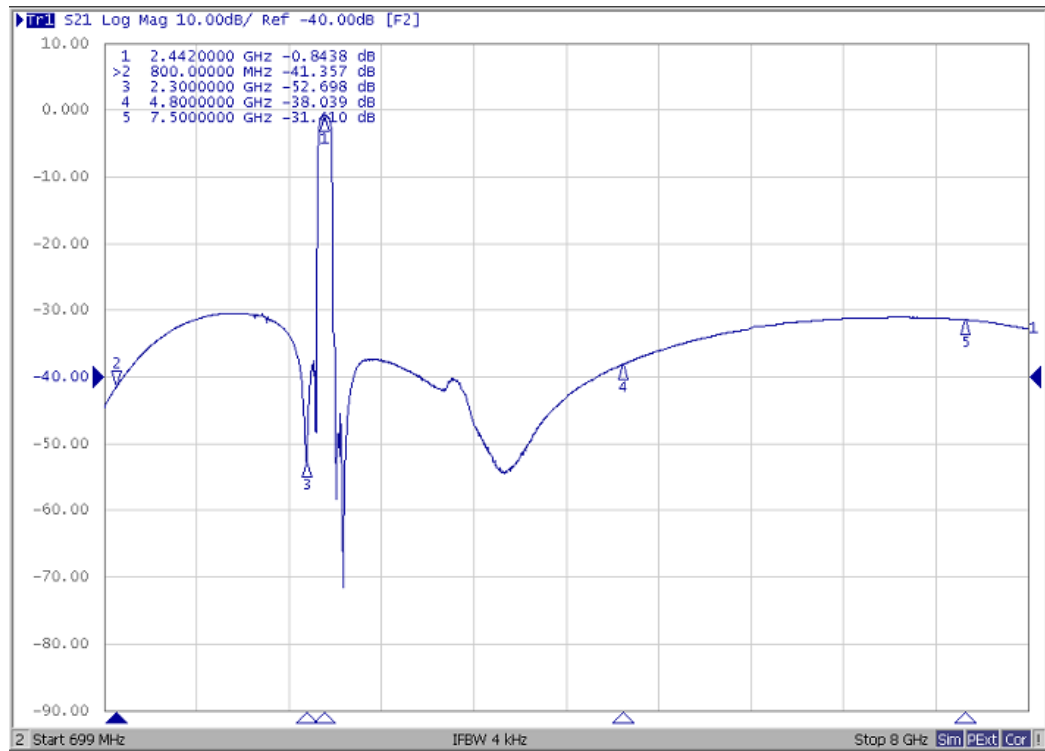
Input Port



Output Port



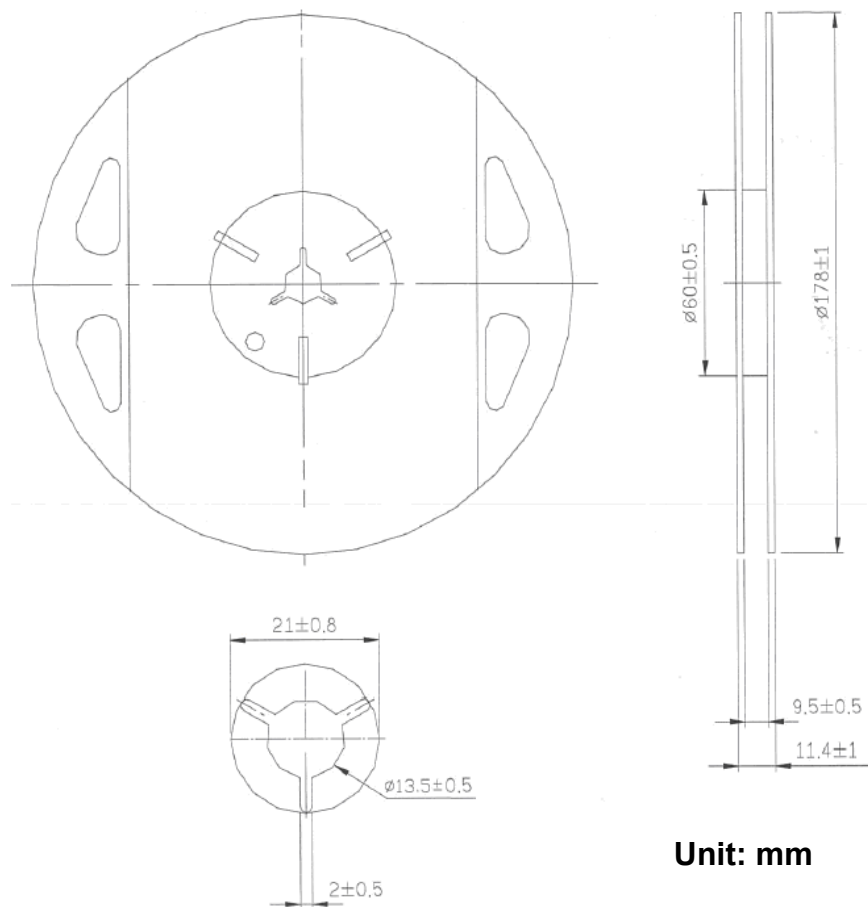
Wide



G. Packing:

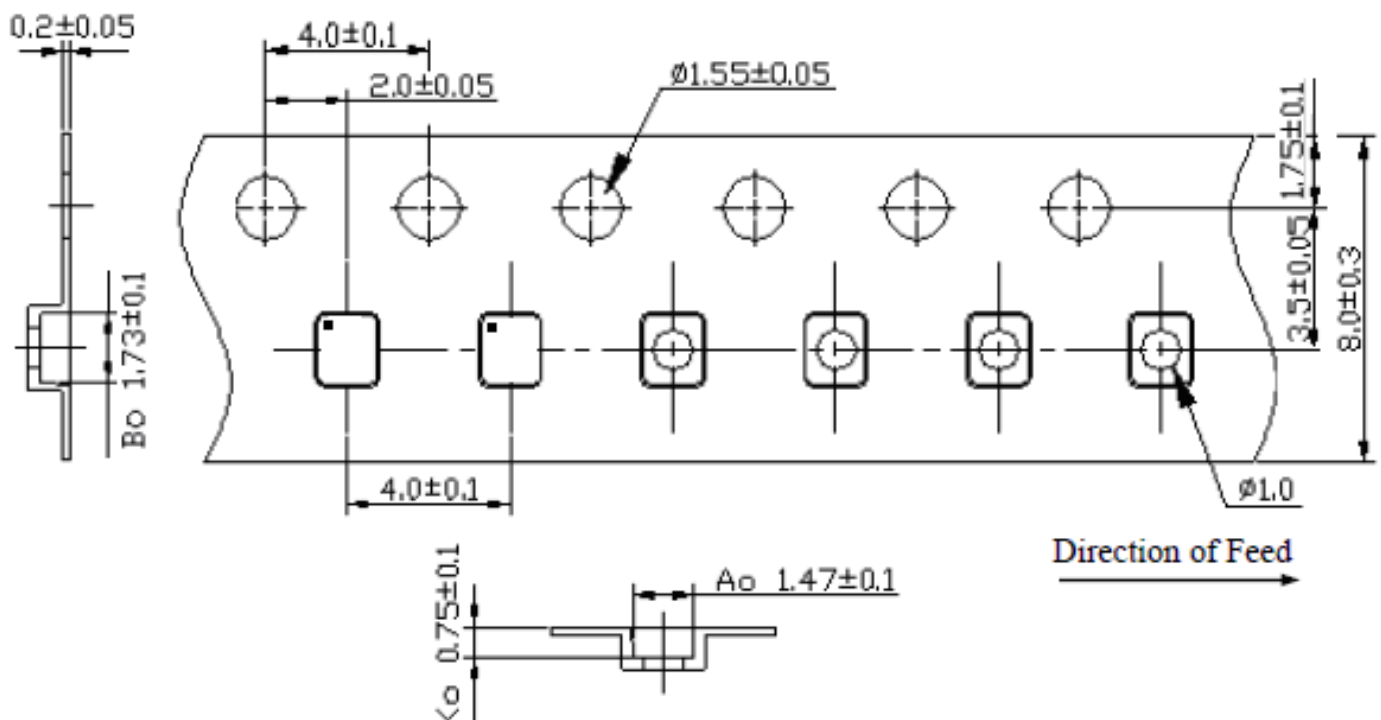
1. Reel Dimension

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



Unit: mm

2. Tape Dimension



Direction of Feed

H. Recommended Solder 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.

