



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

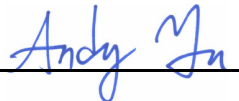
Product Description: BAW Filter 2442 MHz SMD 1.1X0.9 mm (BW=79 MHz)

TST Part No.: TA2105B(This part is compliant with AEC-Q200)

Customer Part No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Anne Chen 

Approved by: _____ Andy Yu 

Date: _____ 03, 15, 2019

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 change



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BAW Filter 2442 MHz SMD 1.1X0.9 mm (BW=79 MHz)

MODEL NO.:TA2105B

REV.3.0

A. MAXIMUM RATING:

1. Input power : 28dBm (Ta=+50 °C,10kh,CW)
2. Maximum DC Voltage: +/-3 V
3. Operating temperature range: -40 °C to +85 °C
4. Storage temperature range: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance: $Z_s = 50 // 6.8nH (Q=\infty) \Omega$ (Single)

Terminating load impedance: $Z_L = 50 // 6.8nH (Q=\infty) \Omega$ (Single)

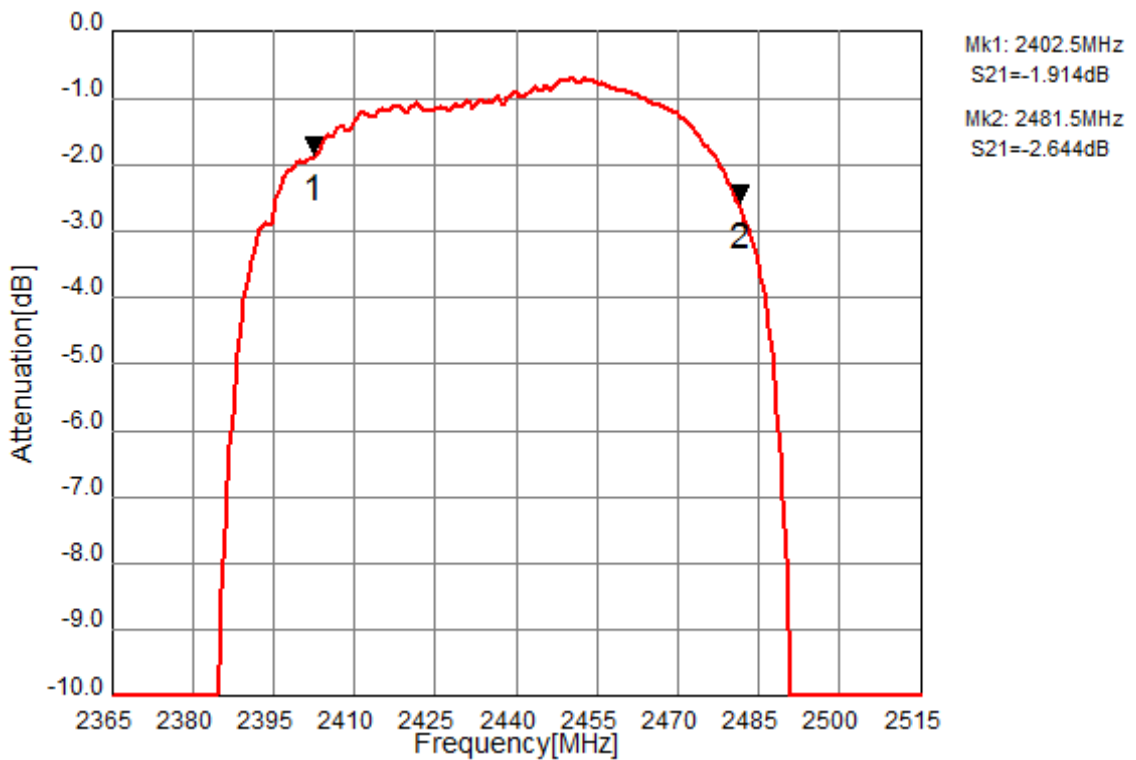
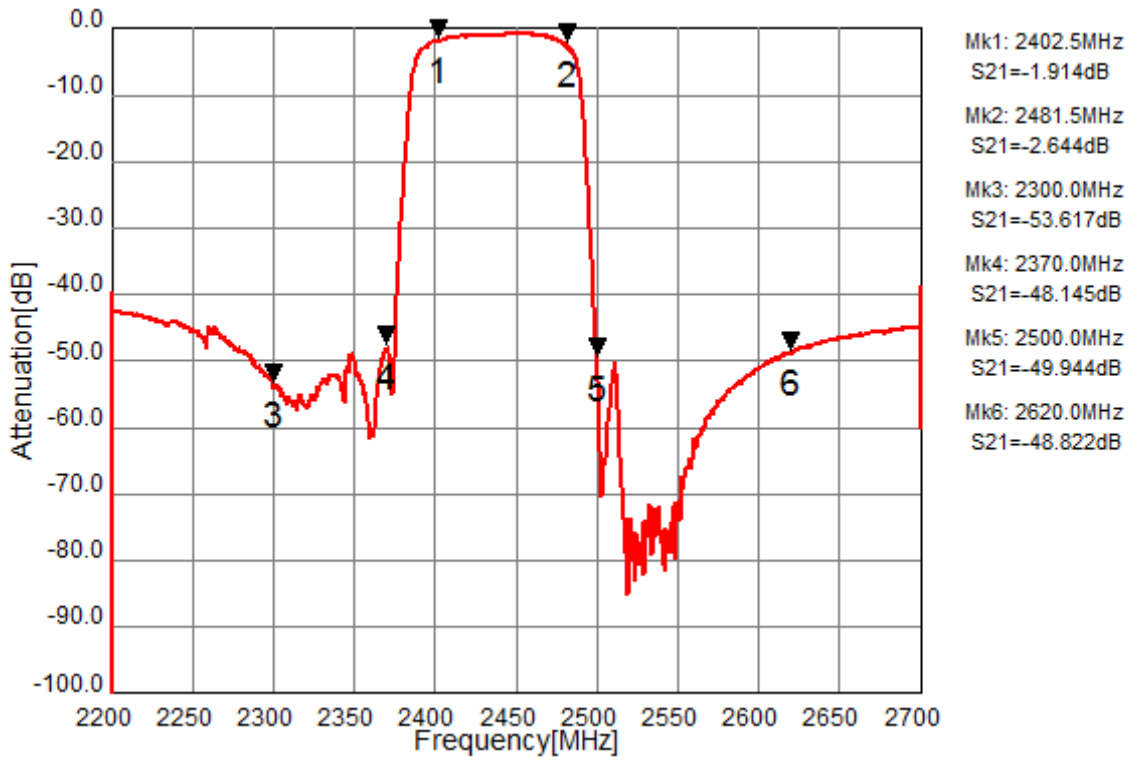
Parameters Description		Unit	Min	Typ	Max	Remarks
Insertion Loss integrated(*1)(*2)	2402.5 ~ 2421.5 MHz	dB	-	1.4	2.0	
	2407.5 ~ 2426.5 MHz	dB		1.3	1.9	
	2412.5 ~ 2471.5 MHz	dB		1.3	1.8	
	2457.5 ~ 2476.5 MHz	dB		1.3	2.0	
	2462.5 ~ 2481.5 MHz	dB	--	1.5	2.4	
Amplitude ripple(*2)	2402.5 ~ 2421.5 MHz	dB	-	0.6	1.5	
	2407.5 ~ 2426.5 MHz	dB		0.5	1.4	
	2412.5 ~ 2471.5 MHz	dB		0.5	1.3	
	2457.5 ~ 2476.5 MHz	dB		0.5	1.5	
	2462.5 ~ 2481.5 MHz	dB		0.7	1.9	
VSWR	Input	2402.5 ~ 2481.5 MHz	-	-	1.5	2.0
	Output	2402.5 ~ 2481.5 MHz	-	-	1.5	2.0
Attenuation:						
800 ~ 2300 MHz		dB	35	39	-	
2300 ~ 2370 MHz		dB	48	51	-	(*3)
2500 ~ 2505 MHz		dB	23	61	-	-30 °Cto -10 °C(*3)
		dB	30		-	-10 °Cto+25 °C(*3)
		dB	42		-	+25 °Cto+85 °C(*3)
2505 ~ 2570 MHz		dB	47	52	-	(*3)
2570 ~ 2620 MHz		dB	42	48	-	(*3)
2620 ~ 2690 MHz		dB	42	45	-	(*3)
2690 ~ 7500 MHz		dB	30	39	-	

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

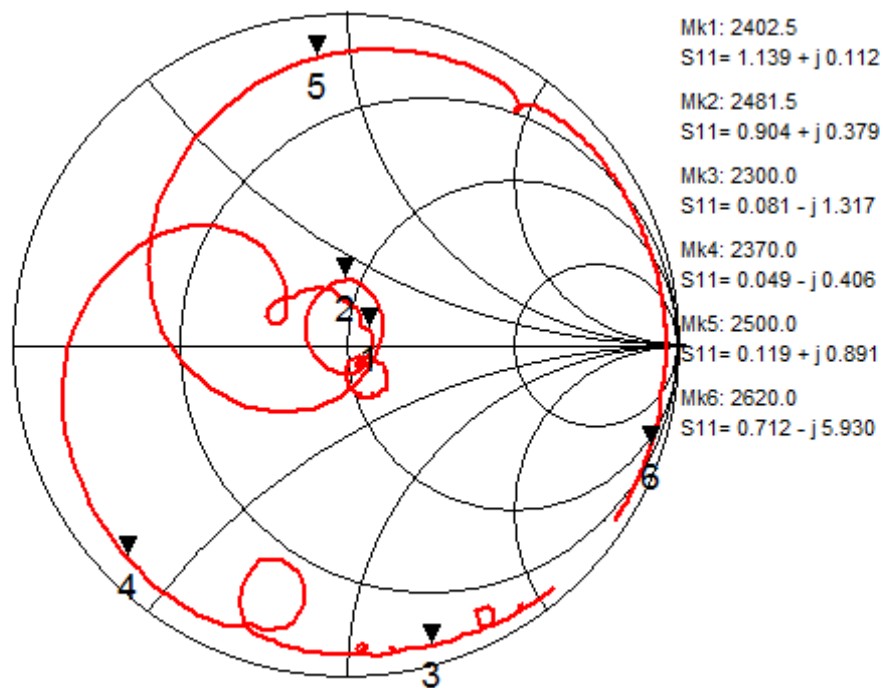
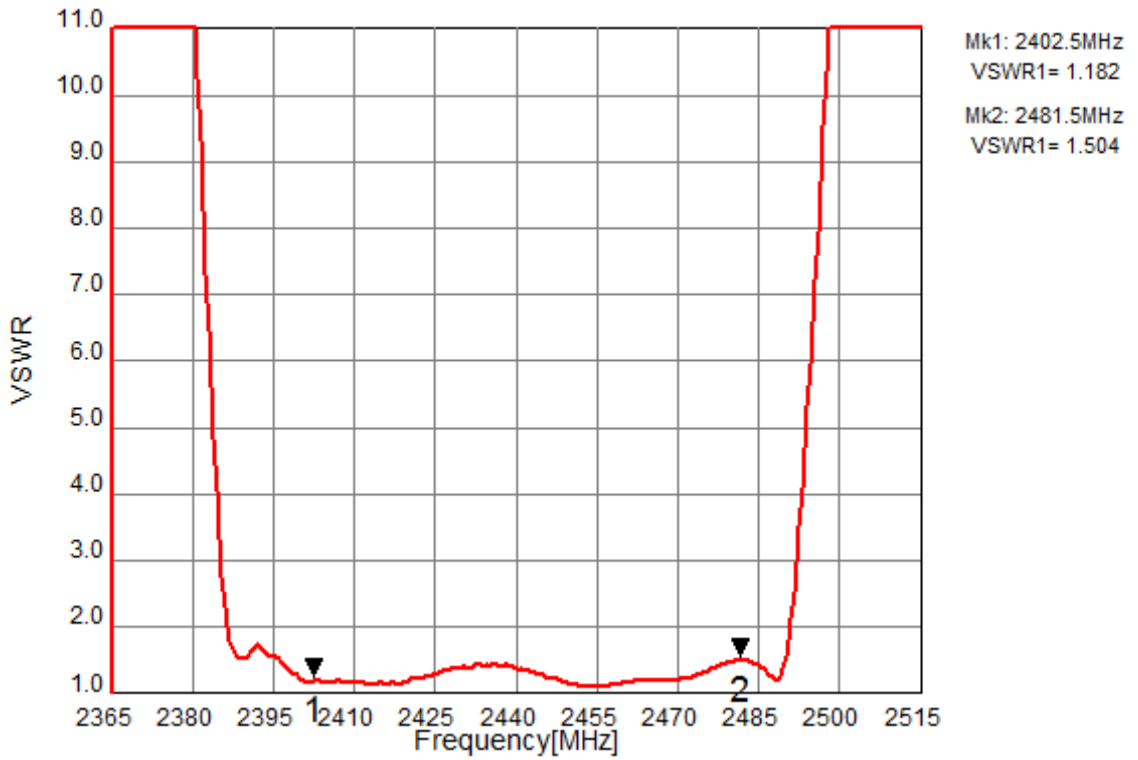
(*2) The integrated loss over any 19MHz channel within the band.

(*3) The integrated loss over any 5MHz channel within the band.

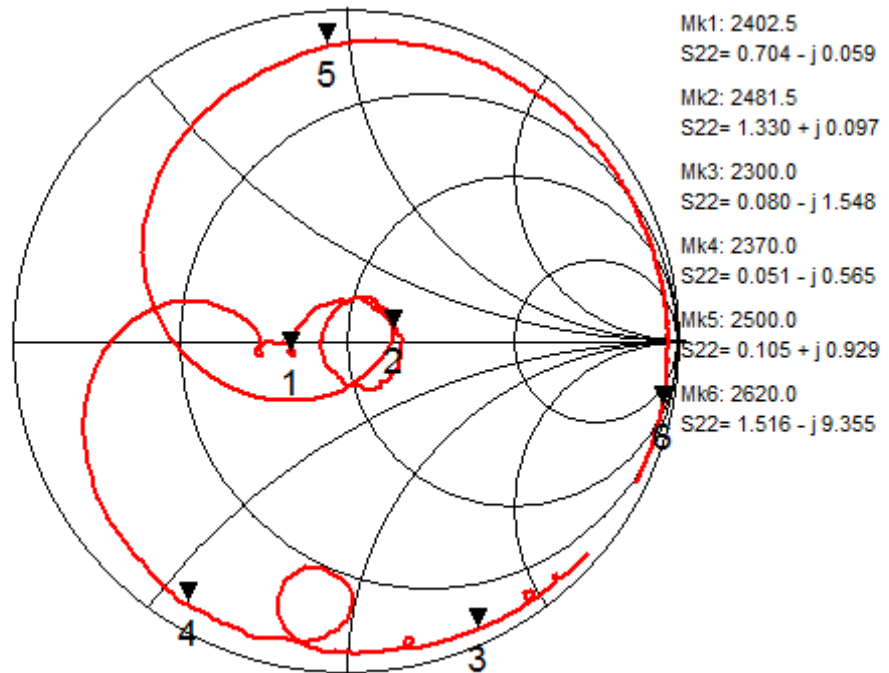
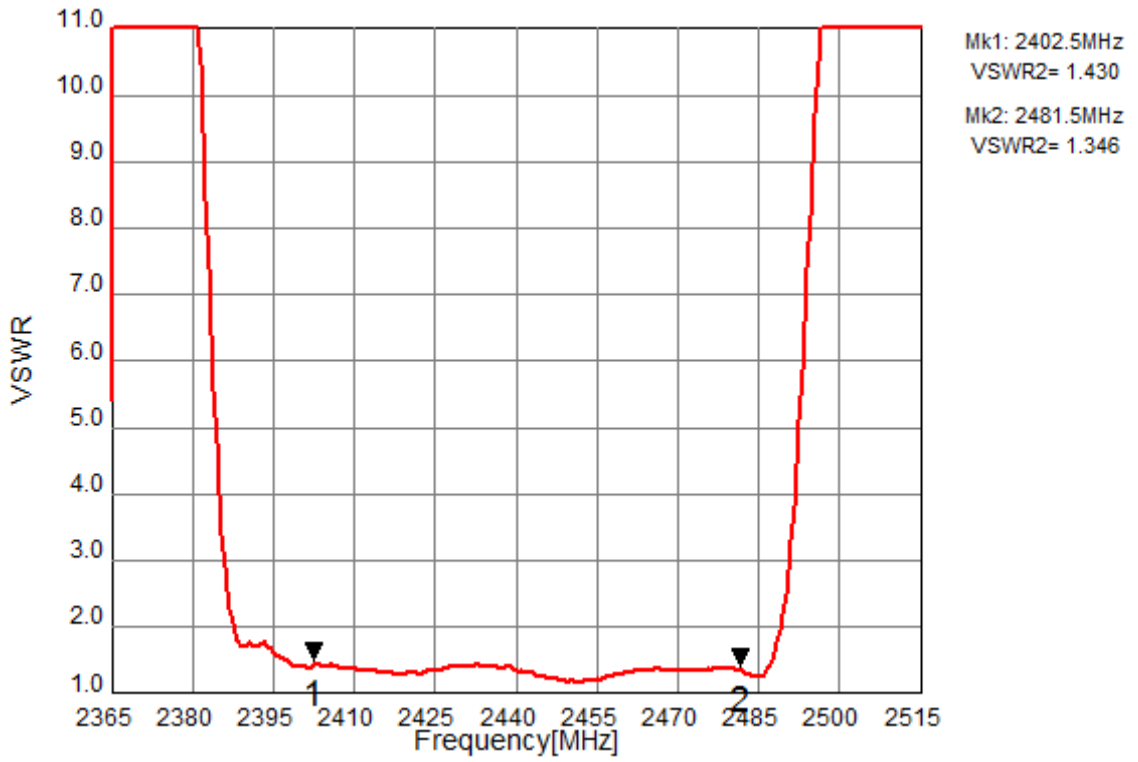
C. FREQUENCY CHARACTERISTICS:



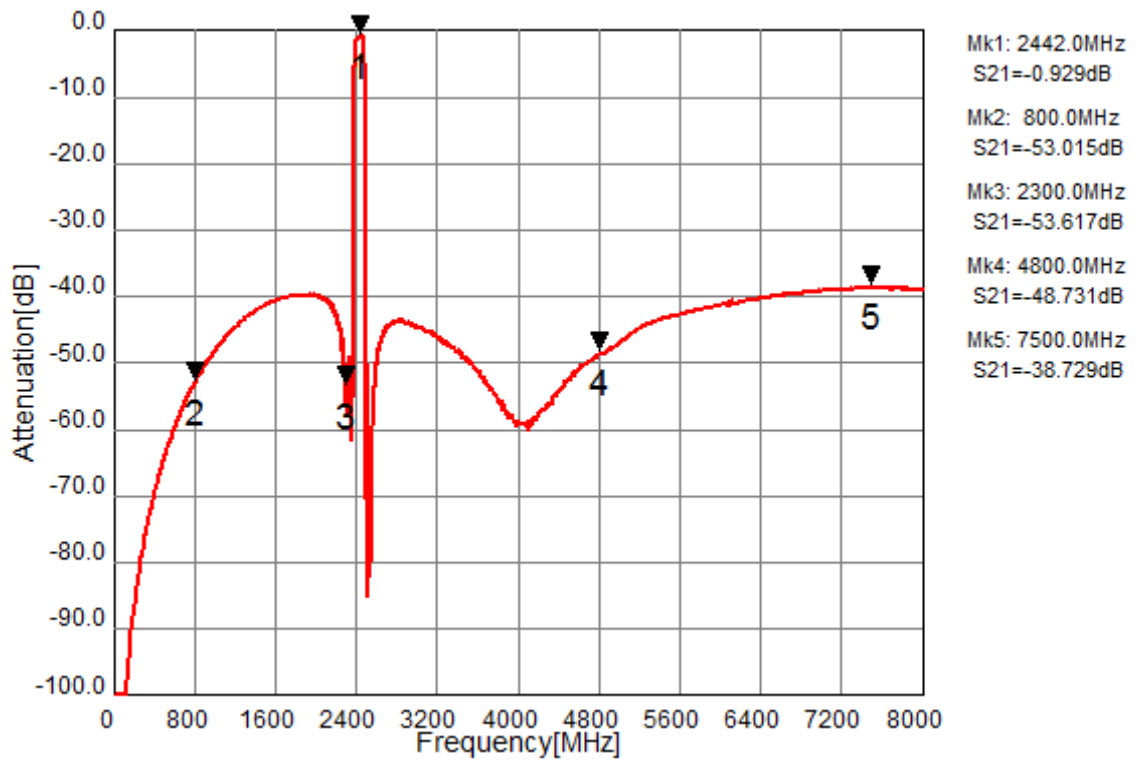
Input Port



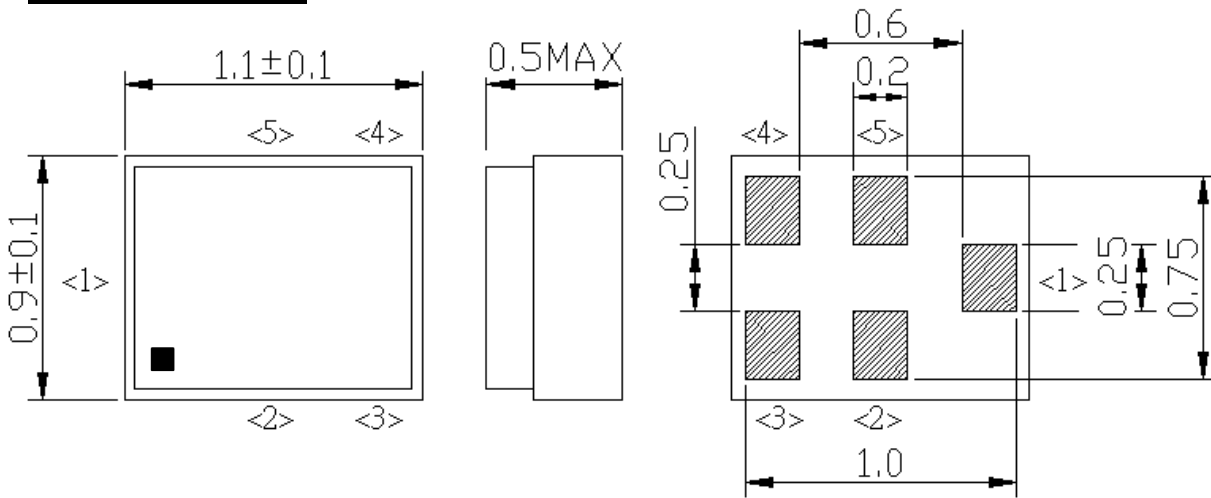
Output Port



Wideband



D.OUTLINE DRAWIN:



Pin Configuration

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

Top View:



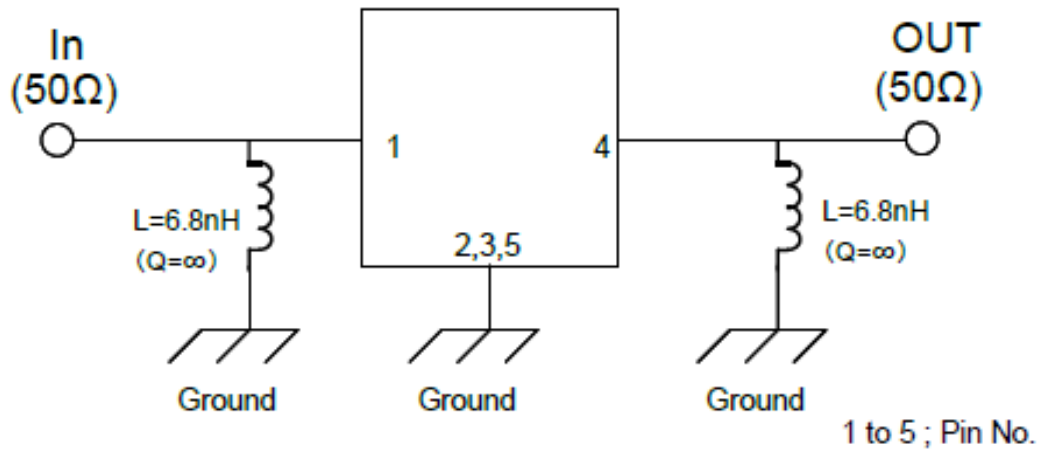
△ : Date Code

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

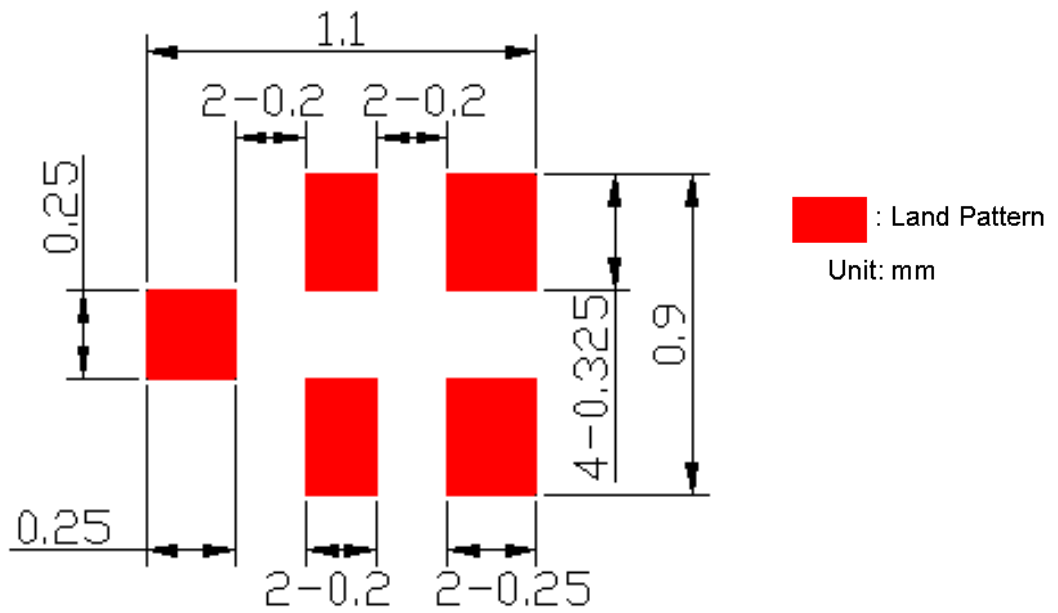
Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2017	A	B	C	Đ	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	∇	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

E. Evaluation Circuit



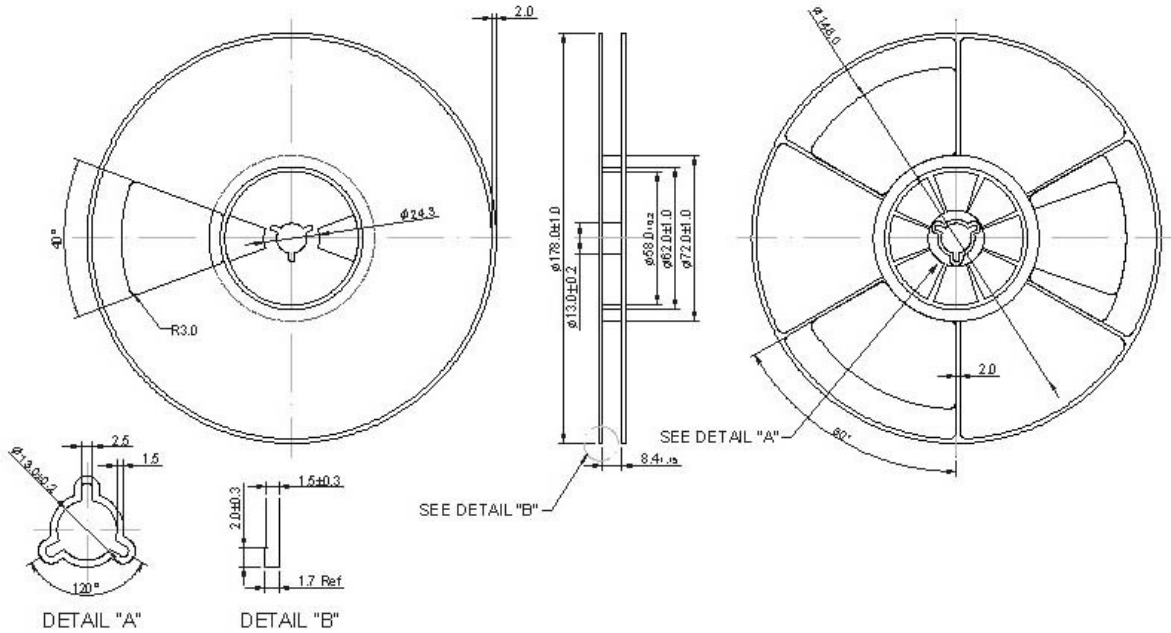
F. PCB Footprint :



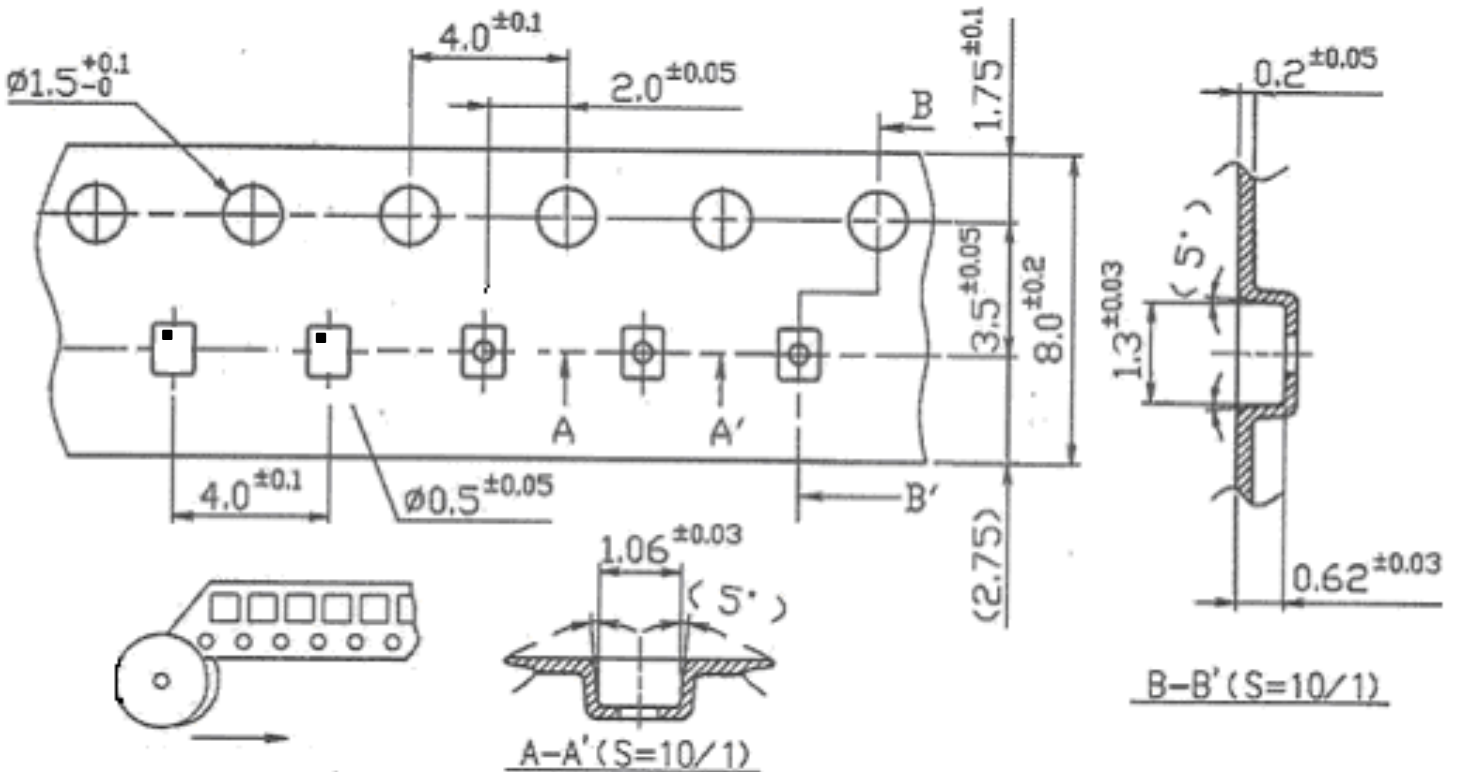
G. PACKING:

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.

