

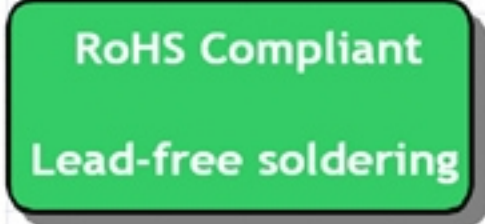
SAW Filter 847 MHz SMD 1.1X0.9 mm (BW=30 MHz)

MODEL NO.:TA2042A

REV.2.0

A. MAXIMUM RATING:

1. Operating temperature range: -30 °C to +85 °C
2. Storage temperature range: -40 °C to +100 °C
3. Input power : 10dBm
4. Maximum DC Voltage: +/-5 V
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 100V(MM) 200V(HBM)



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : $Z_s = 50 \Omega$

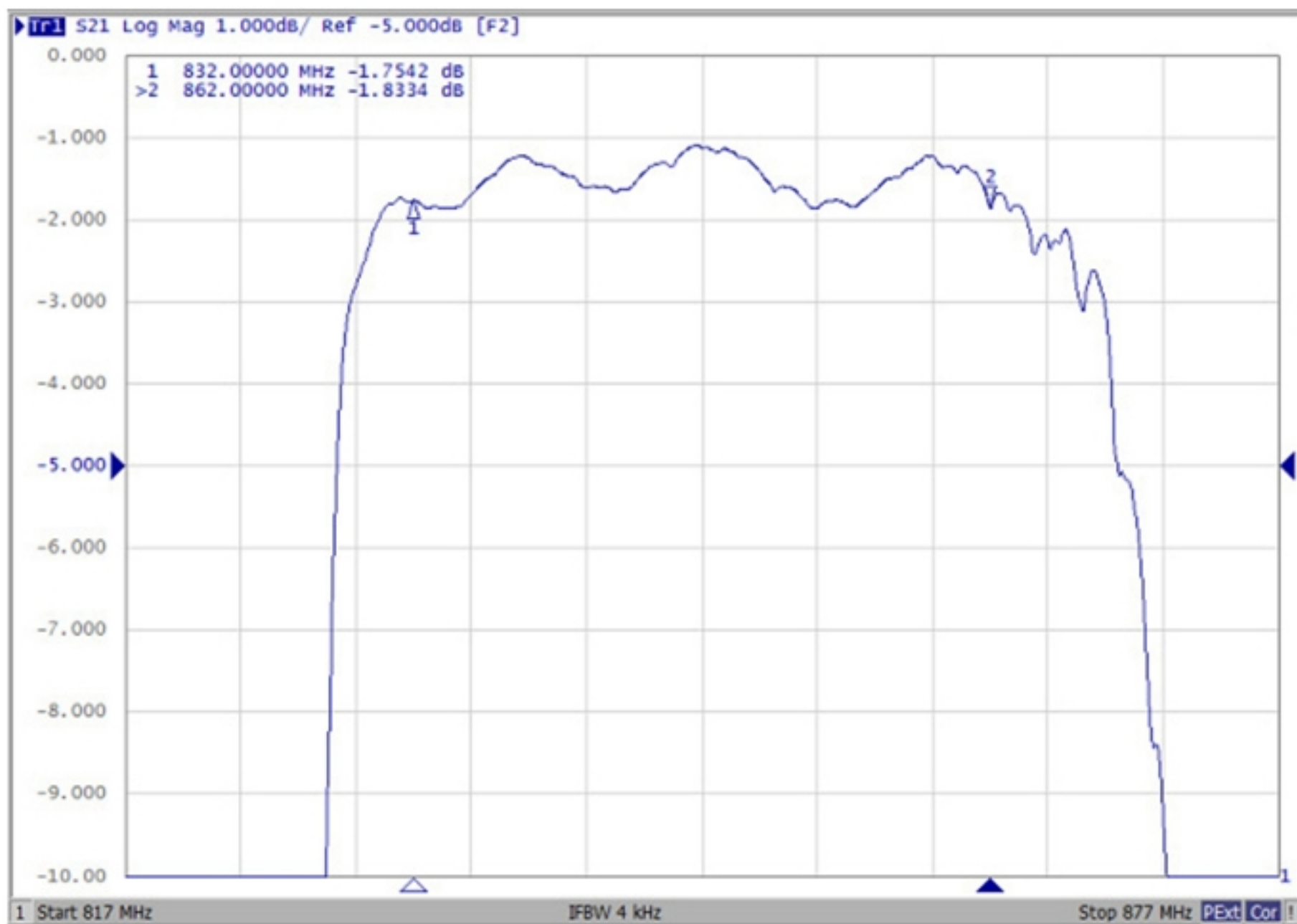
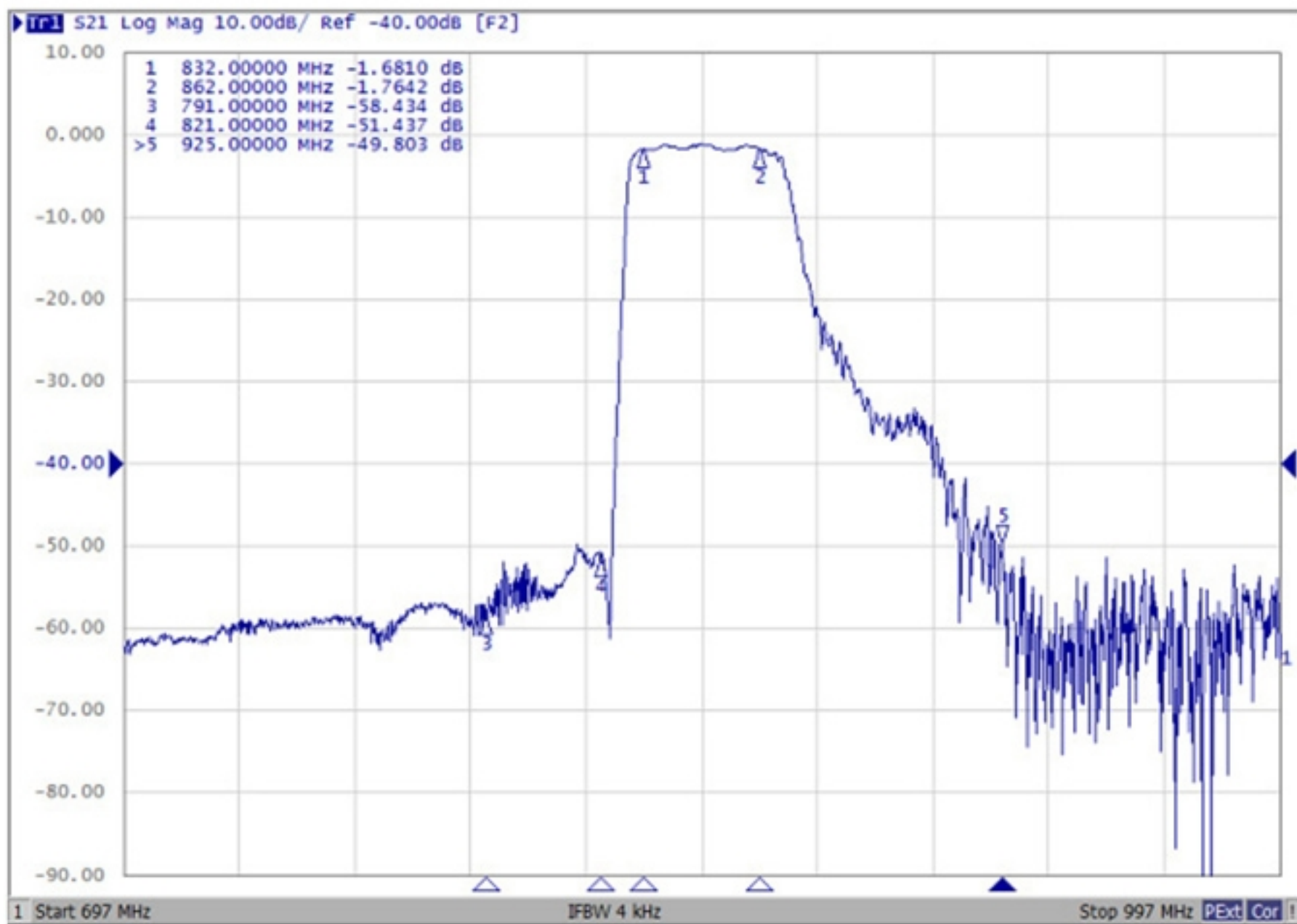
Terminating load impedance : $Z_L = 50 \Omega$

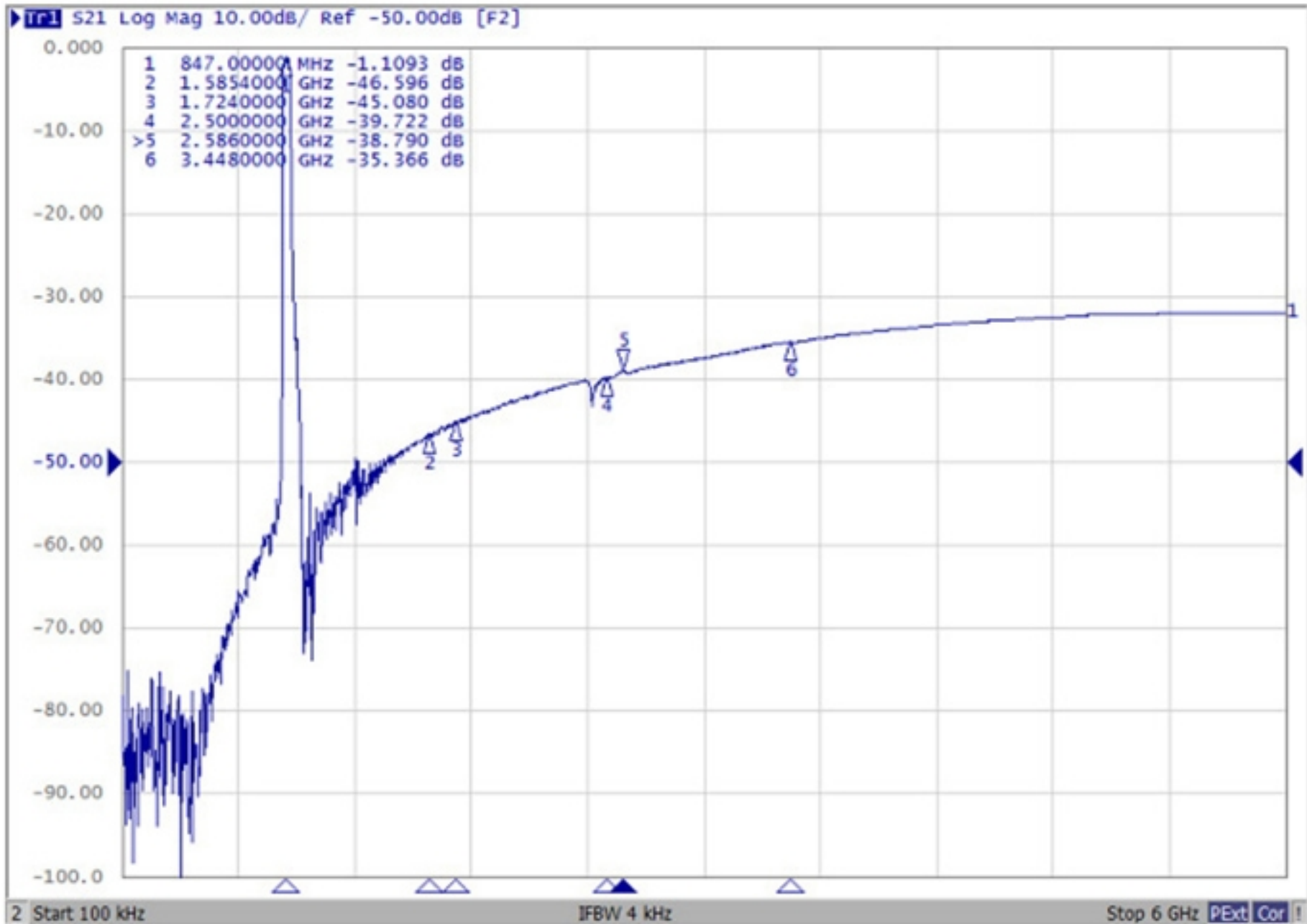
Parameters Description		Unit	Min	Typ	Max	Remarks
Insertion Loss	832~ 862MHz	dB(*1)	-	2.0	2.5	
Amplitude ripple	832~ 862MHz	dB	-	0.9	1.6	
VSWR	Input	832~ 862MHz	-	2.3	2.5	
	Output	832~ 862MHz	-	2.3	2.5	
Attenuation:						
DC ~ 791 MHz		dB	30	55	-	
791 ~ 821 MHz		dB	40	48	-	
925 ~ 960 MHz		dB	20	50	-	
1565.42 ~ 1573.374 MHz		dB	35	47	-	
1573.374 ~ 1577.466 MHz		dB	35	47	-	
1577.466 ~ 1585.42 MHz		dB	35	46	-	
1597.5515 ~ 1605.886 MHz		dB	35	46	-	
1664 ~ 1724 MHz		dB	25	45	-	
1805 ~ 1880 MHz		dB	25	44	-	
2110 ~ 2170 MHz		dB	25	42	-	
2400 ~ 2500 MHz		dB	30	41	-	
2496 ~ 2586 MHz		dB	30	40	-	
2570 ~ 2620 MHz		dB	30	40	-	
2620 ~ 2690 MHz		dB	25	39	-	
3328 ~ 3448 MHz		dB	20	37	-	
Input impedance		Ω	50			single-ended
Output impedance		Ω	50			single-ended

(*1) Specification of insertion loss includes loss that comes from the test board.(0.05dB)

C. FREQUENCY CHARACTERISTICS:

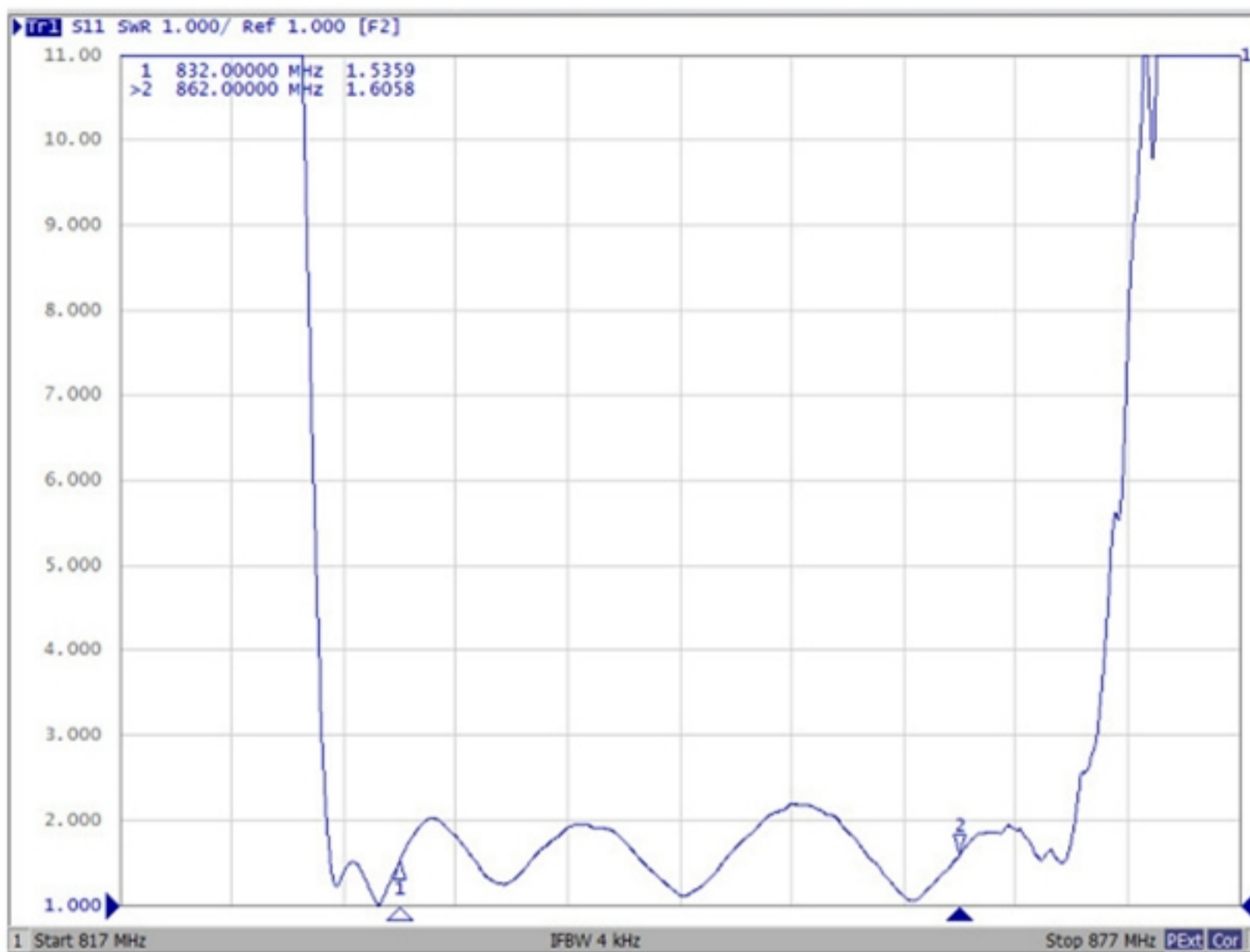
Passband



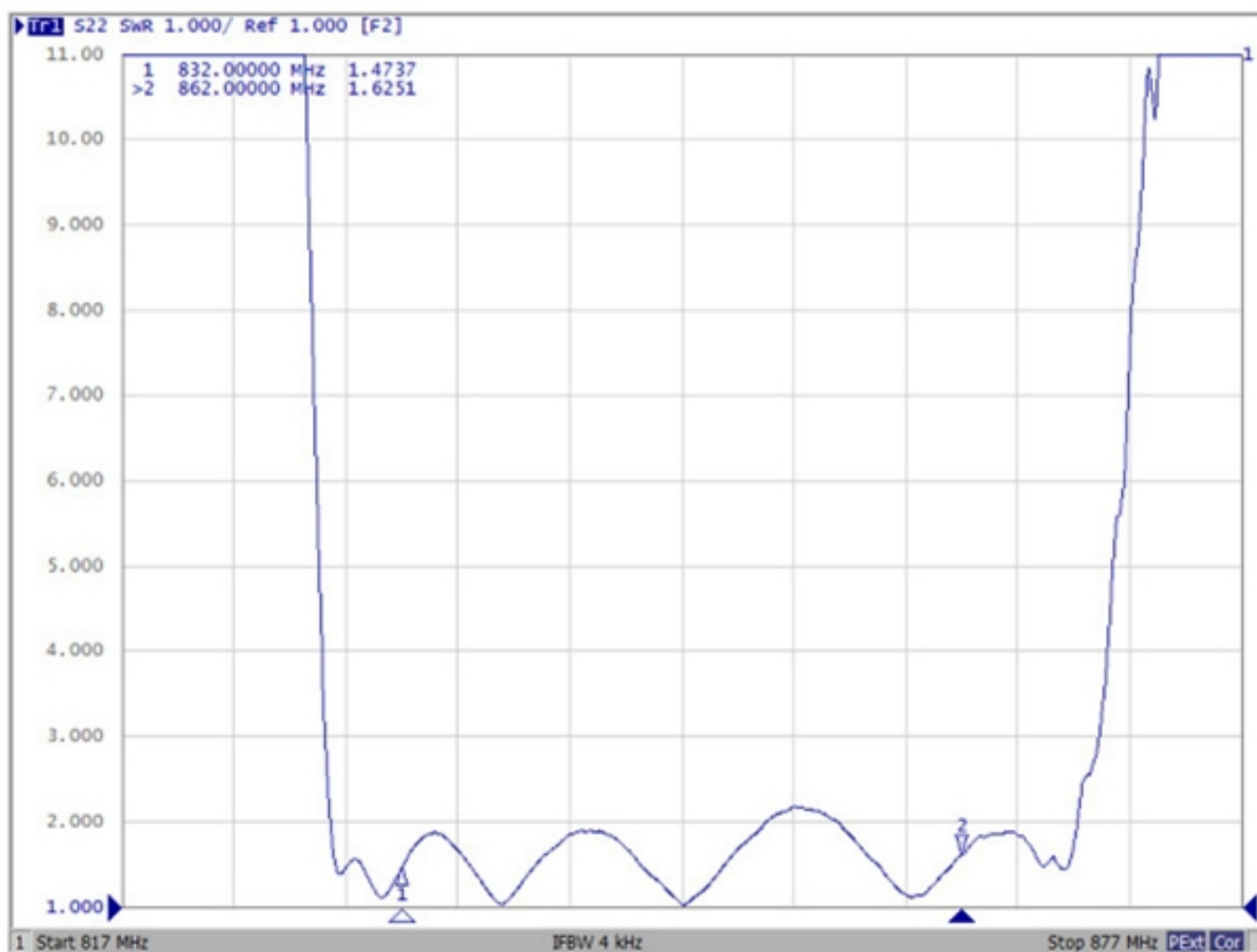


Reflection Functions :

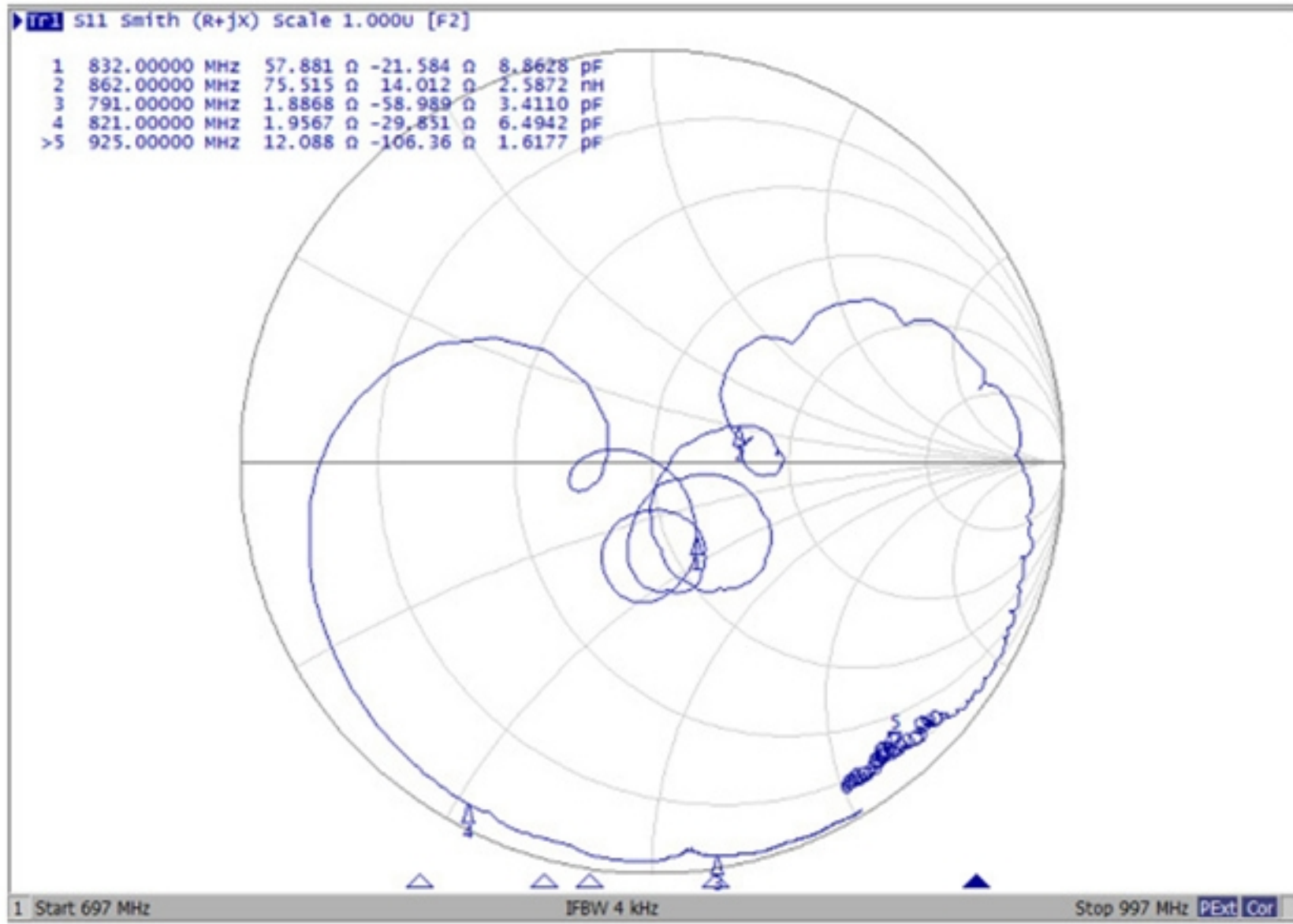
S11 VSWR



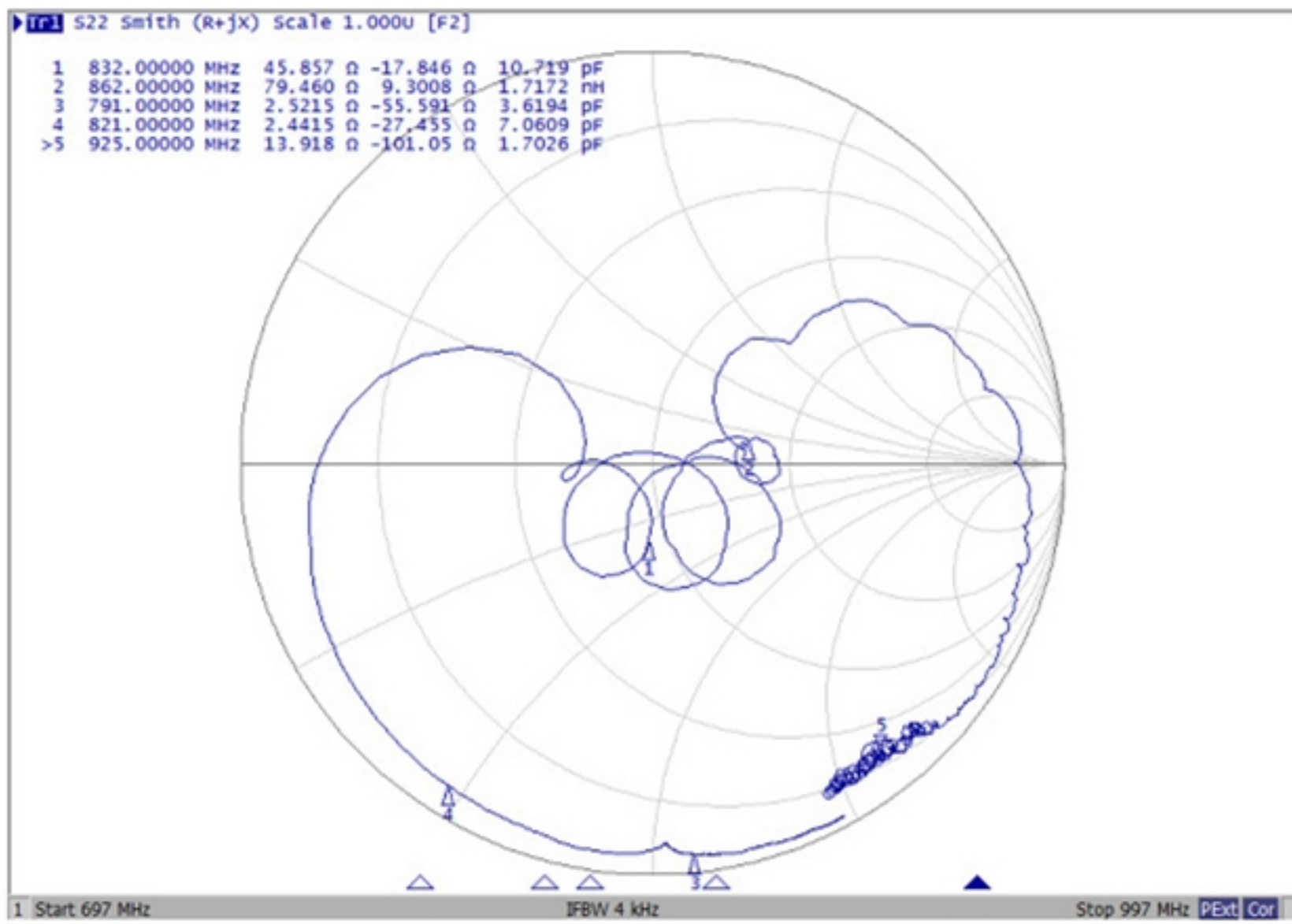
S22 VSWR



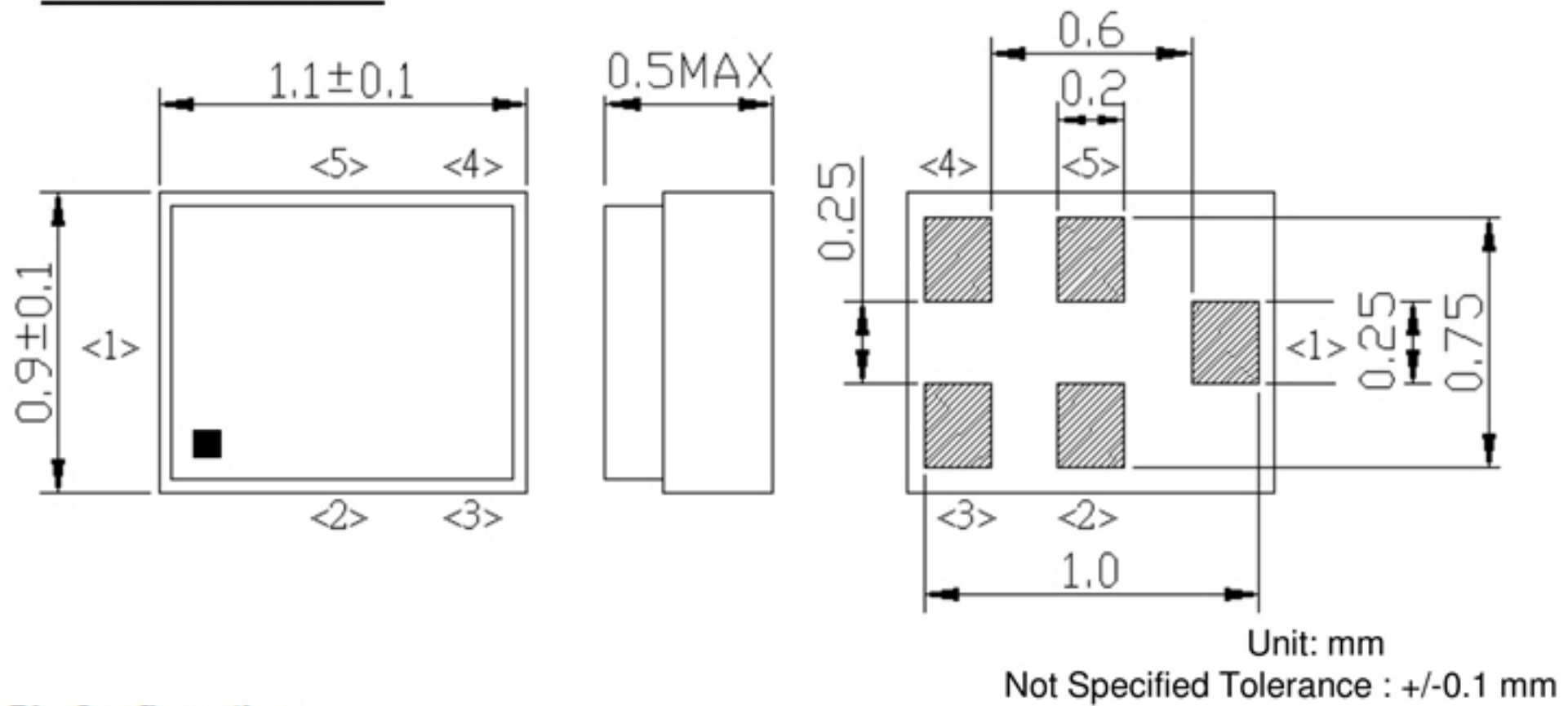
S11 Smith Chart



S22 Smith Chart



D.OUTLINE DRAWIN:



Pin Configuration

Pin No.	Symbol	Function
1	IN	Single-ended pin
2	GND	Ground
3	GND	Ground
4	OUT	Single-ended pin
5	GND	Ground

Top View (Sample Production):



Top View (Mass Production):



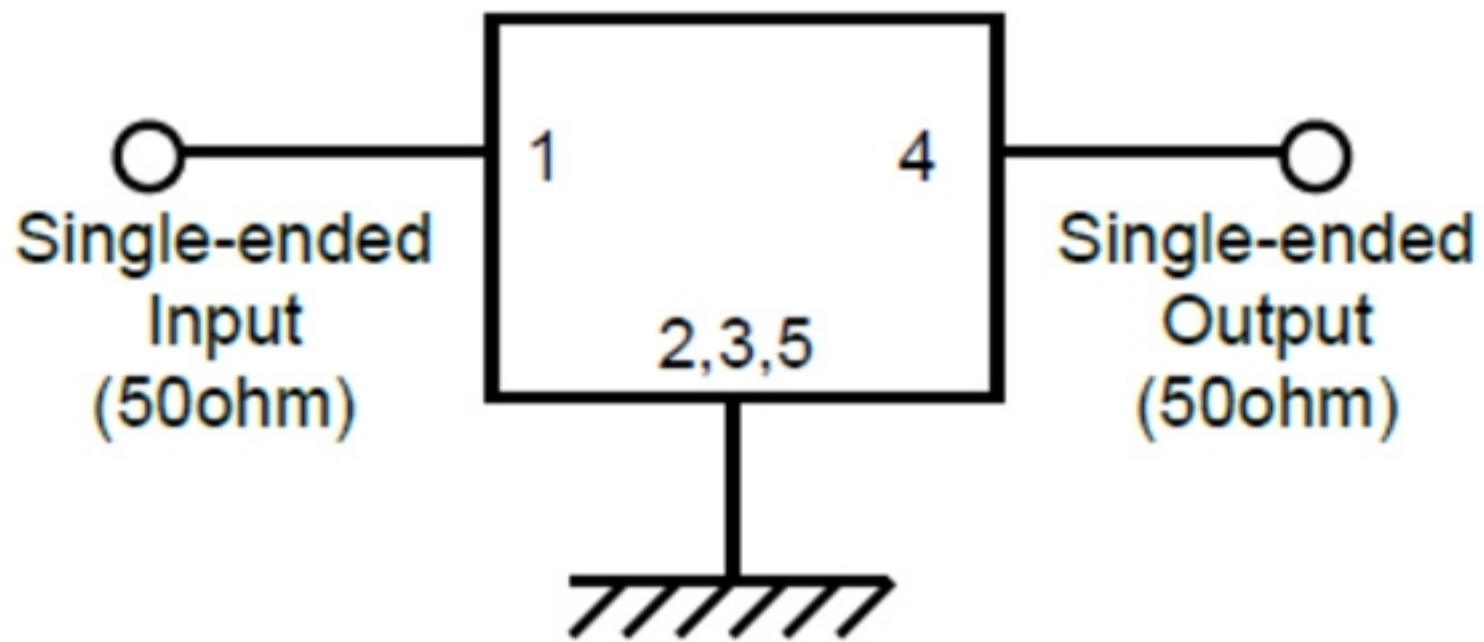
△ : Date Code

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

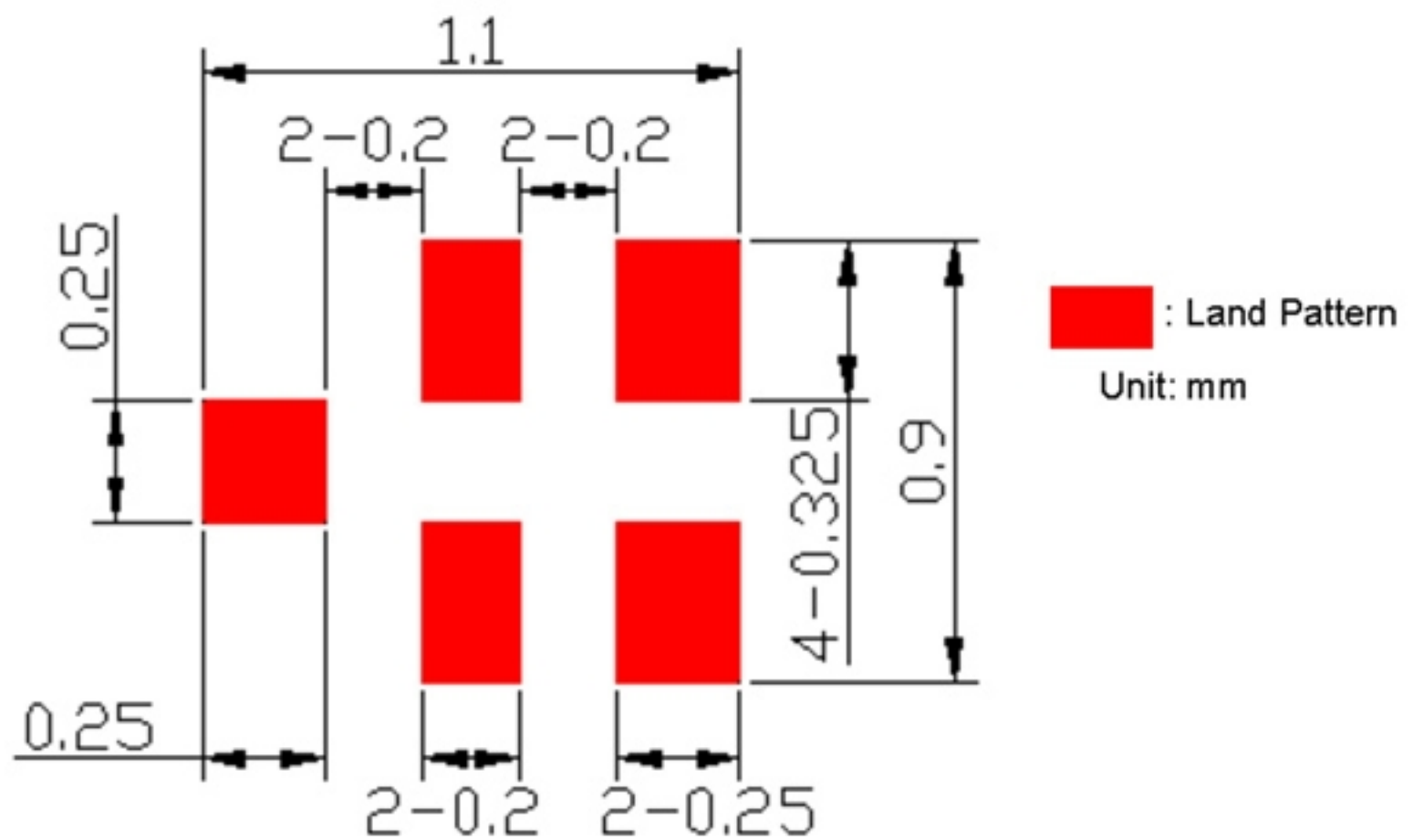
Date Code: Follow below table. (4-year cycle)

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
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
2021	A	B	C	∅	E	F	G	H	J	K	L	M

E.Evaluation Circuit



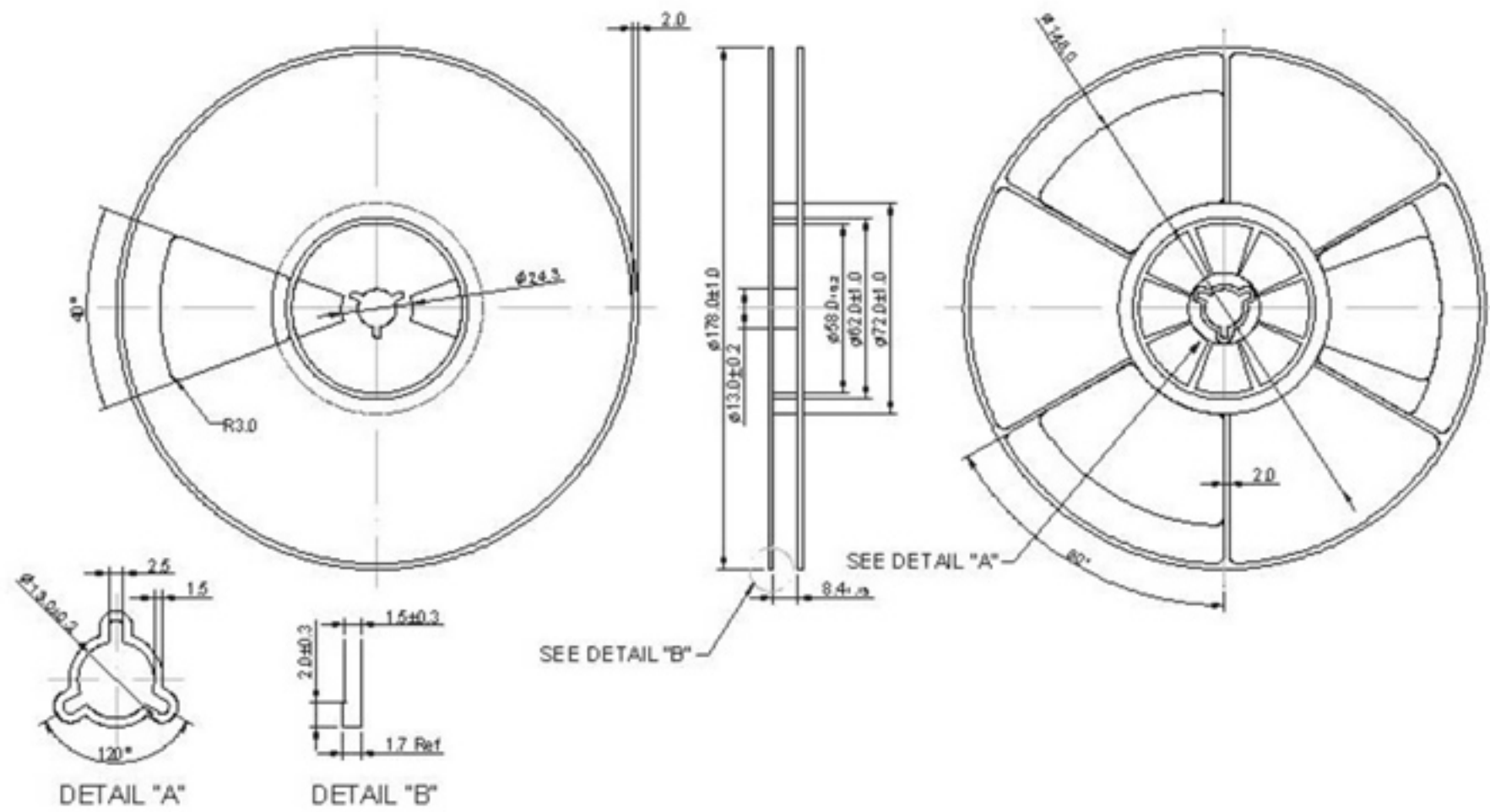
F. PCB Footprint :



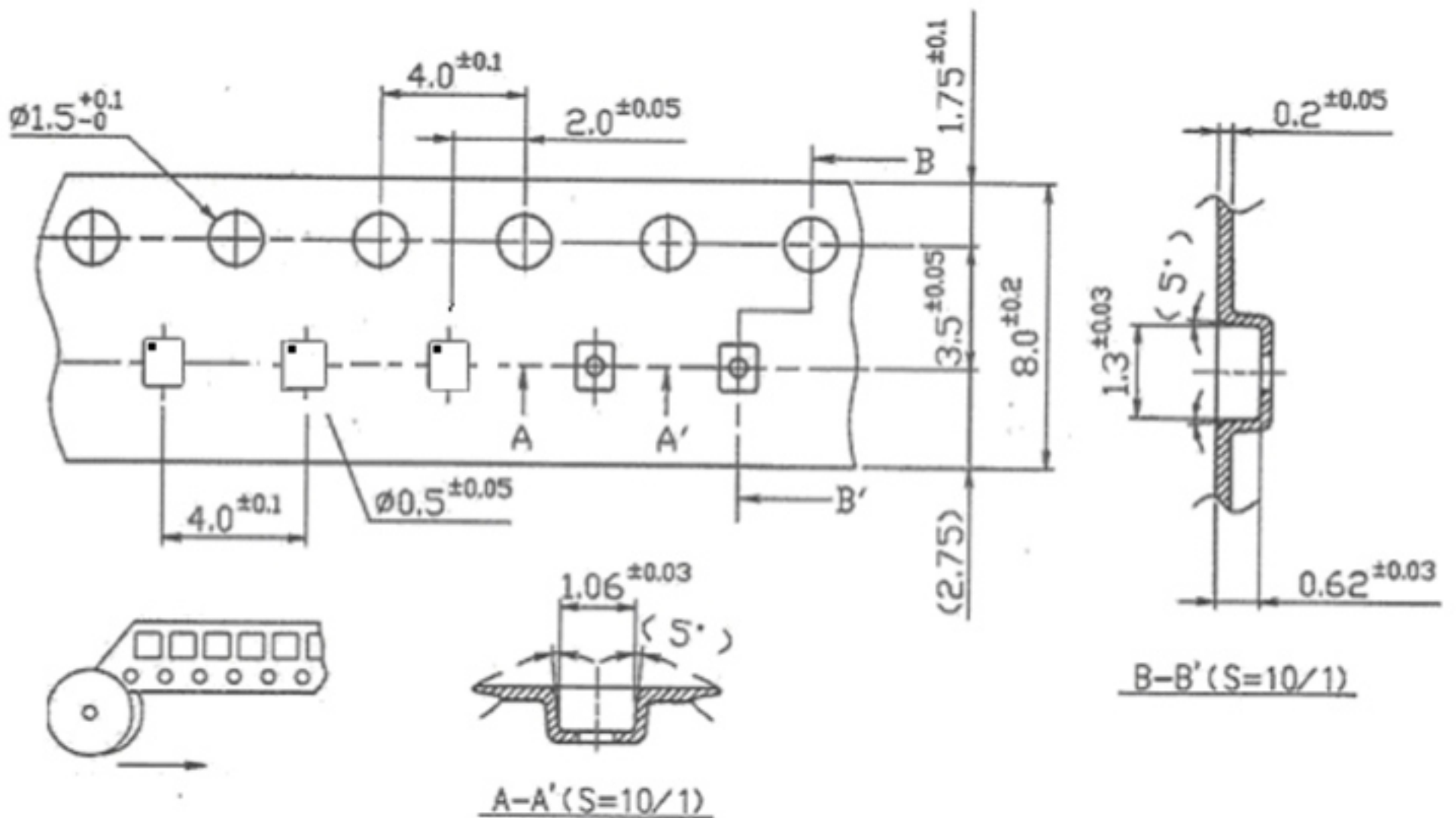
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H . RECOMMENDED REFLOW PROFILE :

1. Preheating shall be fixed at $150\sim 180^{\circ}\text{C}$ for $60\sim 90$ seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for $50\sim 80$ seconds and at $245\sim 260^{\circ}\text{C}$ peak (min. 10sec).
4. Time : 2 times.

