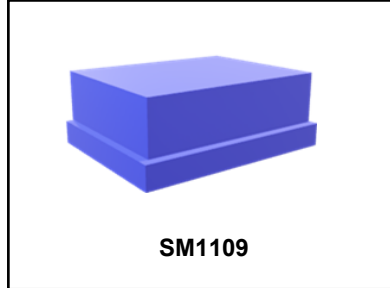


**SF2561LA**

**806 MHz  
SAW Filter**



**MAXIMUM RATING:**

- Operating temperature range: -40 °C to +85 °C
- Storage temperature range: -40 °C to +100 °C
- Input power : 10dBm
- Maximum DC Voltage: +/-5 V
- Moisture Sensitivity Level: Level 1 (MSL 1)
- ESD 100V(MM) 200V(HBM)
- AEC-Q200 Qualified

**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	791~ 821MHz	Db(*1)	-	2.7	3.8	
Amplitude ripple	791~ 821MHz	dB	-	1.4	2.6	
VSWR	Input	791~ 821MHz	-	2.1	2.4	
	Output	791~ 821MHz	-	2.1	2.4	
<b>Attenuation:</b>						
<b>832 ~ 862 MHz</b>		dB	37	41	-	
<b>1559 ~ 1607 MHz</b>		dB	40	45	-	
<b>1582 ~ 1642 MHz</b>		dB	40	45	-	
<b>2373 ~ 2463 MHz</b>		dB	30	37	-	
<b>2400 ~ 2500 MHz</b>		dB	30	37	-	
<b>3164 ~ 3284 MHz</b>		dB	25	34	-	
<b>3955 ~ 4105 MHz</b>		dB	20	31	-	
<b>4746 ~ 4926 MHz</b>		dB	20	29	-	
<b>4900 ~ 5950 MHz</b>		dB	20	26	-	
<b>5537 ~ 5747 MHz</b>		dB	20	27	-	
<b>6328 ~ 6568 MHz</b>		dB	20	25	-	
<b>7119 ~ 7389 MHz</b>		dB	15	23	-	
Input impedance		$\Omega$	50			single-ended
Output impedance		$\Omega$	50			single-ended

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

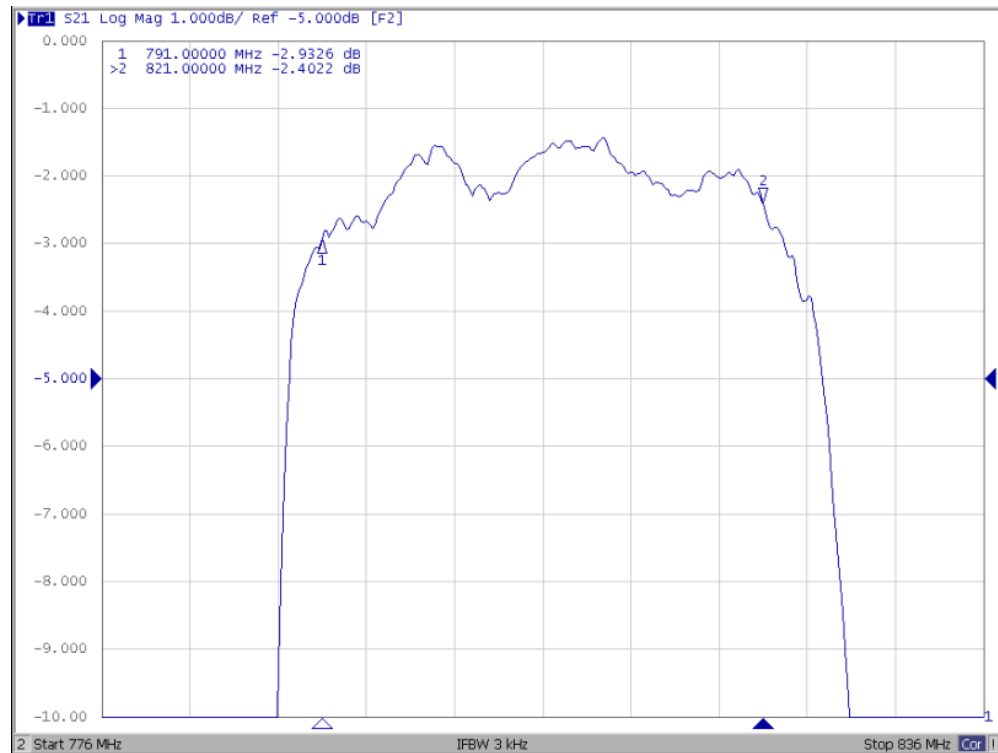
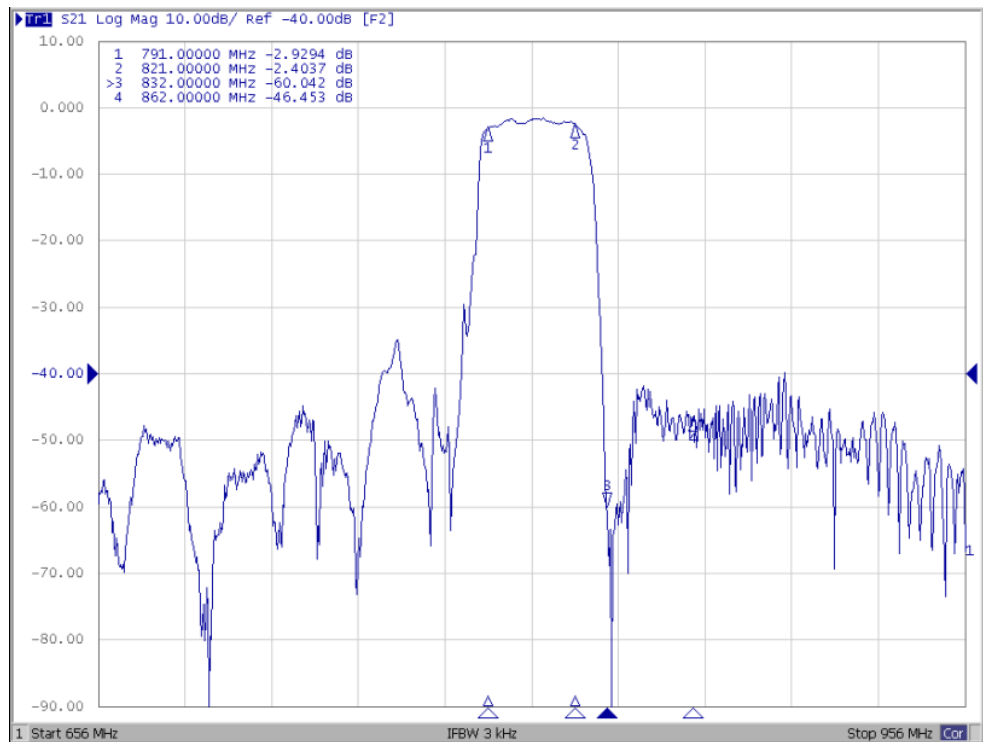
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. NOTES:**

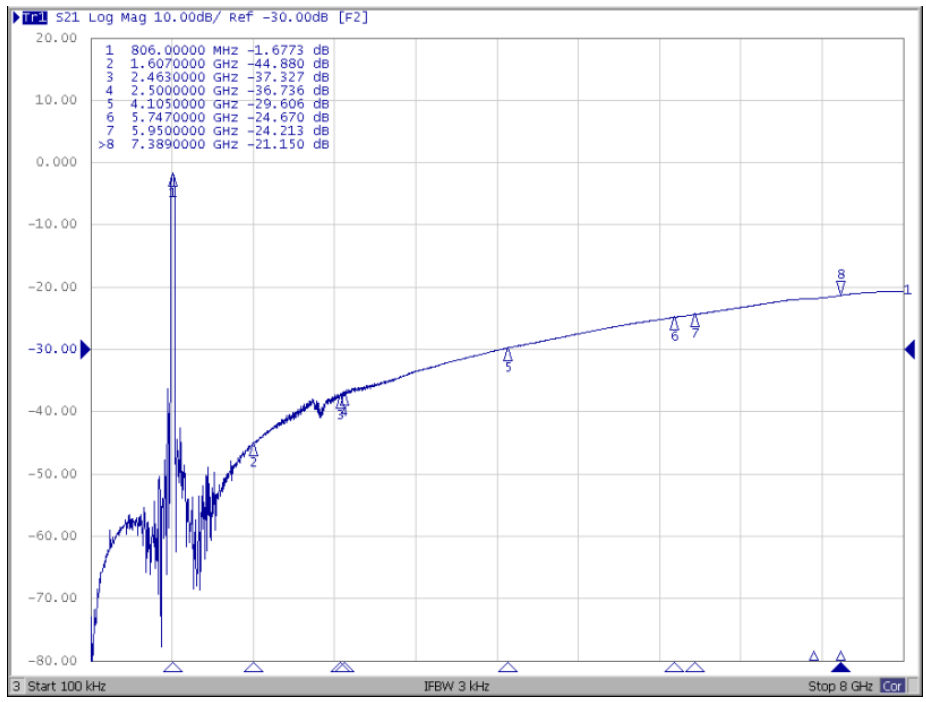


1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

# FREQUENCY CHARACTERISTICS

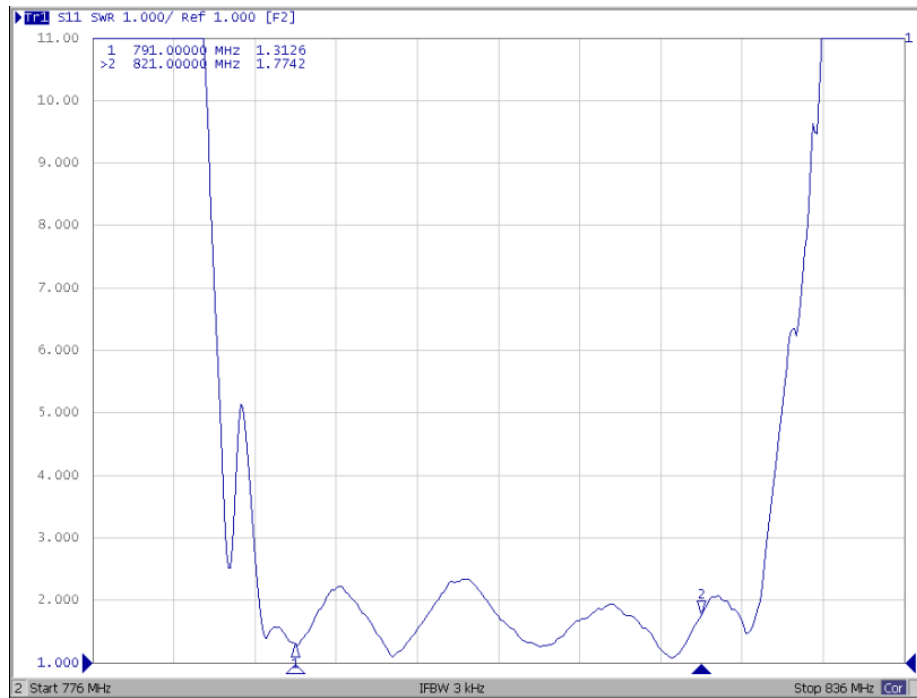
## Passband



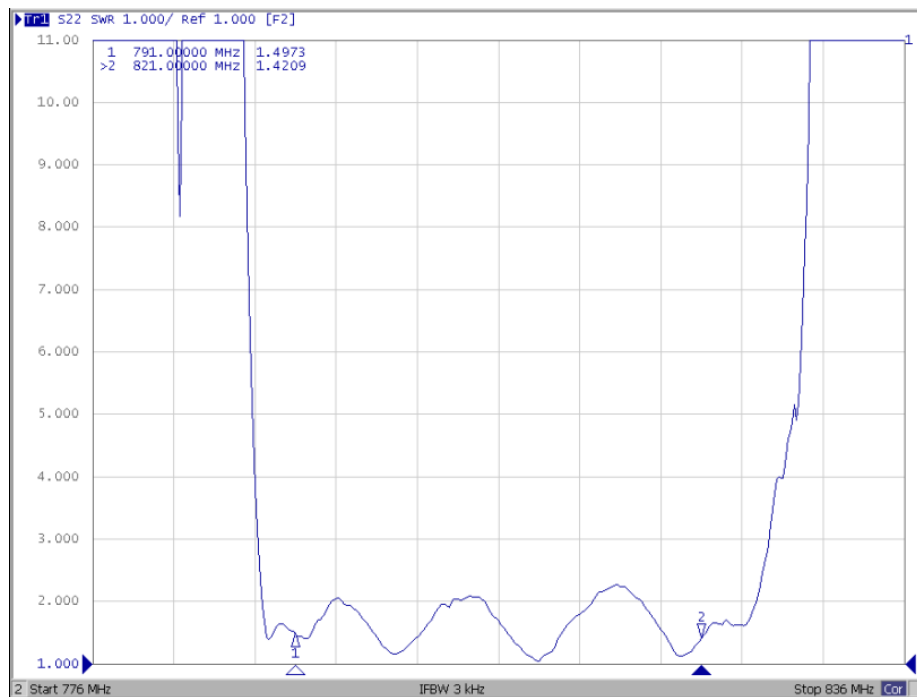


# Reflection functions :

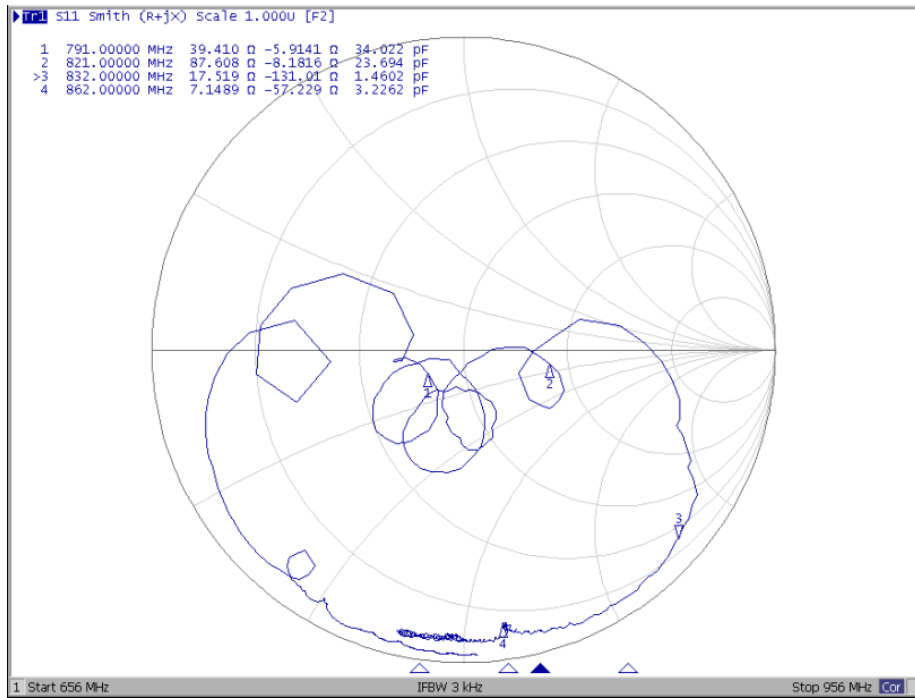
## S11 VSWR



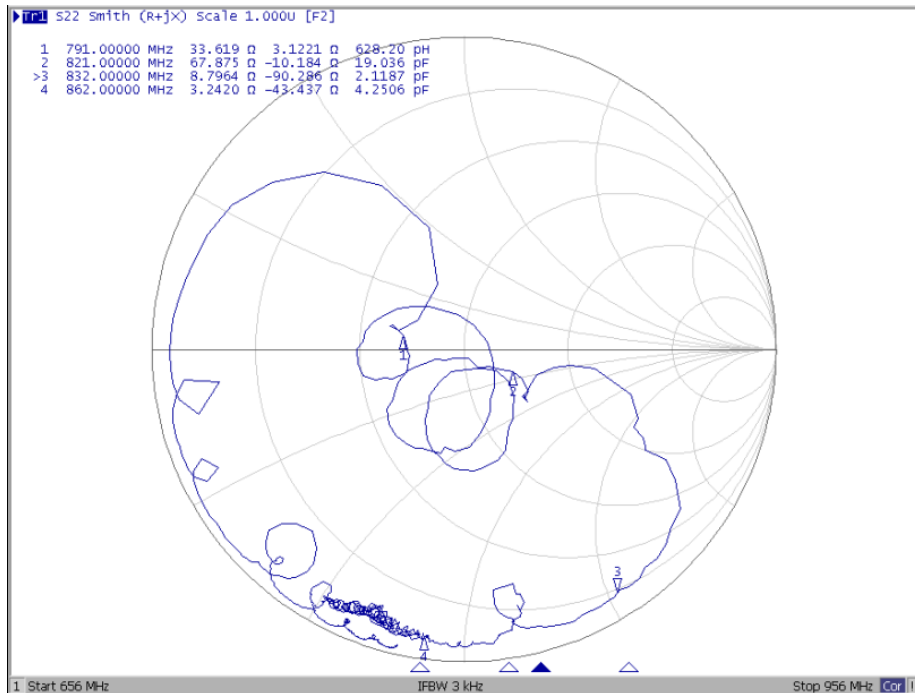
## S22 VSWR



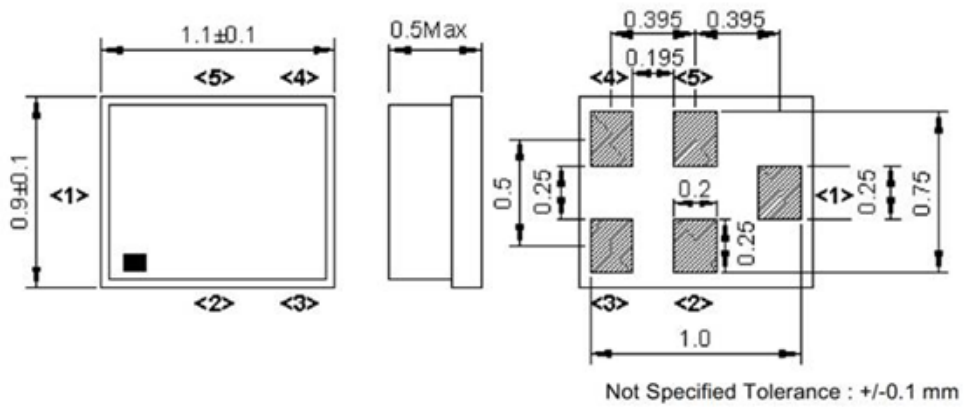
## S11 Smith Chart



## S22 Smith Chart



# OUTLINE DRAWING



Unit: mm  
Not Specified Tolerance : +/-0.1 mm

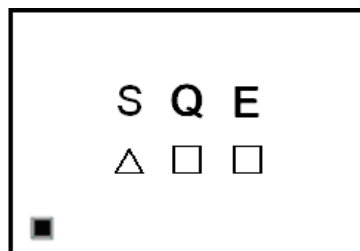
## Pin Configuration

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):



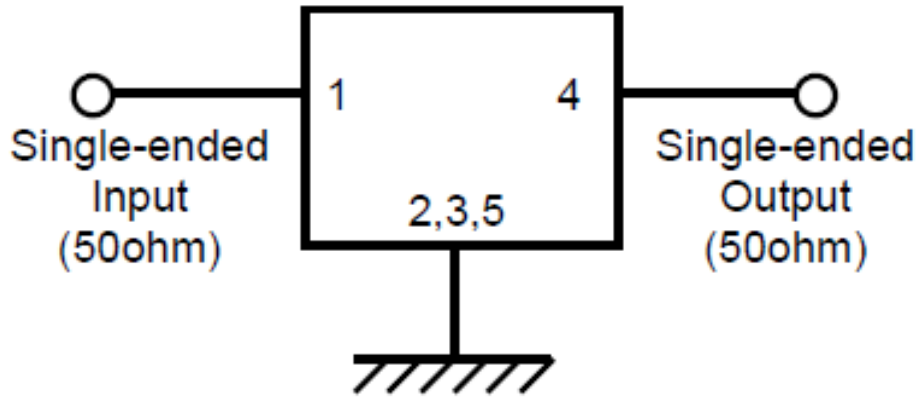
△ : Date Code

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

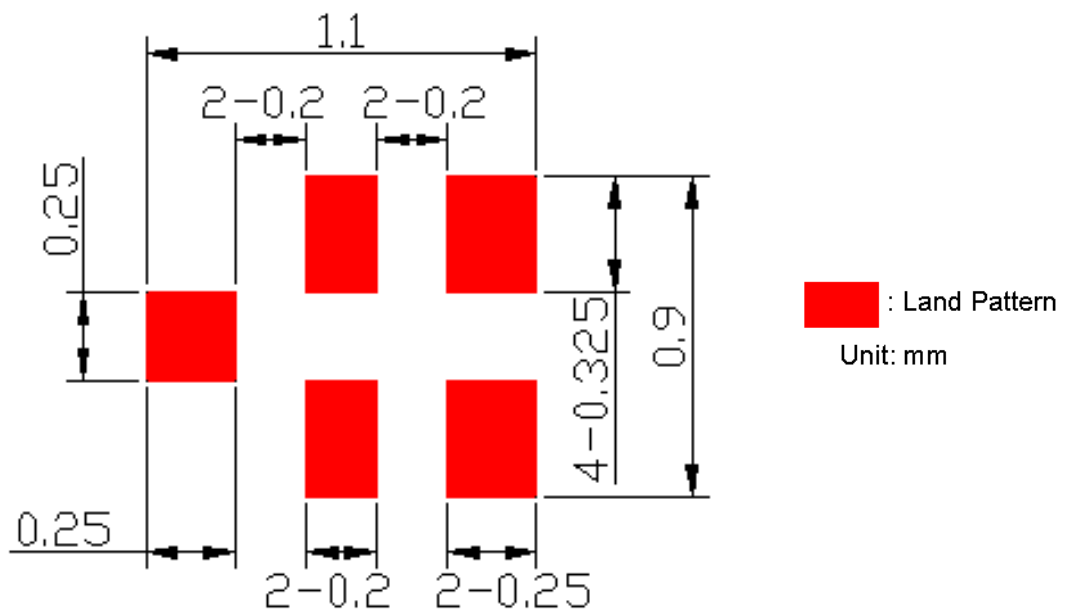
**Date Code:** Follow below table. (4-year cycle)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2020 / 2024	n	p	q	r	s	t	u	v	w	x	y	z
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

## Evaluation Circuit

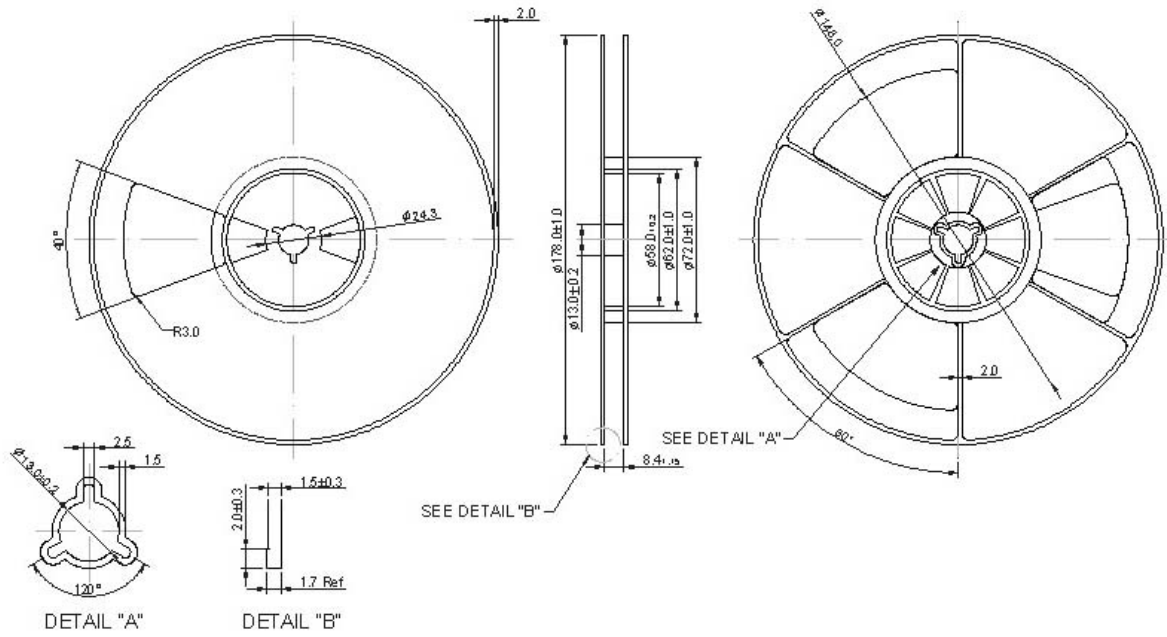


## PCB Footprint

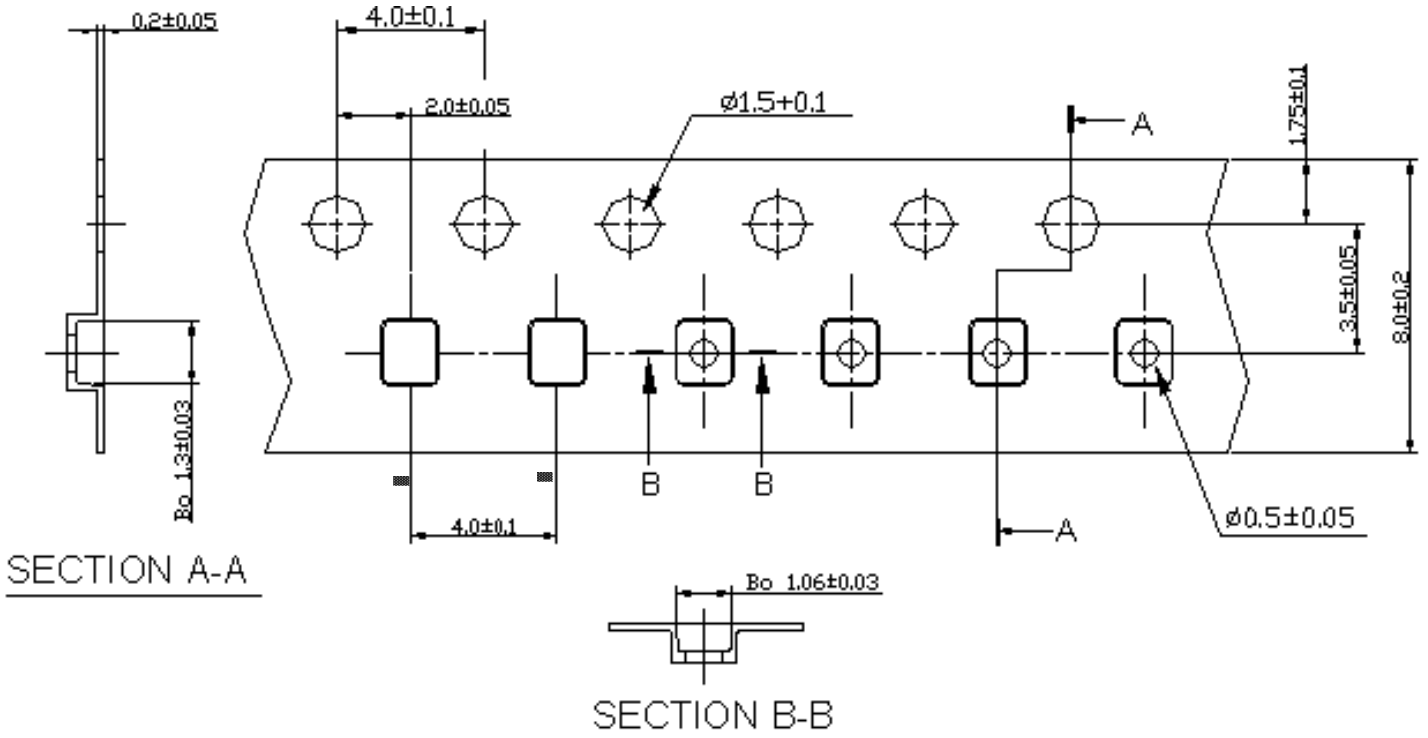


PACKING  
REEL DIMENSION

Reel Count  
7" = 3000  
13" = 10,000



TAPE DIMENSION



Direction of Feed





## 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.

