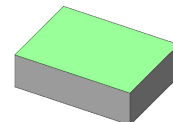


SF2578JM

**1900/2017.5 MHz
Dual Filter Band**



SM1511

MAXIMUM RATING:

- Input power : 10dBm
- Maximum DC Voltage: 5V
- Operating temperature range: -20 °C to +85 °C
- Storage temperature range: -20 °C to +85 °C
- Moisture Sensitivity Level: Level 1 (MSL 1)
- ESD 50V(MM) 100V(HBM)

**ELECTRICAL CHARACTERISTICS:
(Filter1)**

Parameters Description		Unit	Minimum	Typical	Maximum	Note
Insertion Loss(*1)	1880 ~ 1920 MHz	dB	-	1.5	2.0	
VSWR	Input	-	-	1.7	2.0	
	Output			1.7	2.0	
Attenuation:						
10 ~ 1795 MHz		dB	30	33	-	-
1795 ~ 1820 MHz		dB	25	27	-	-
1820 ~ 1850 MHz		dB	20	25	-	
1820 ~ 1850 MHz		dB	16	25		
1950 ~ 1980 MHz		dB	20	24	-	-
1980 ~ 2025 MHz		dB	20	28	-	-
2025 ~ 2400 MHz		dB	30	34	-	-
2400 ~ 2500 MHz		dB	32	38	-	-
2500 ~ 4900 MHz		dB	20	28	-	-
4900 ~ 6000 MHz		dB	20	26	-	-

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

(Filter2)

Parameters Description		Unit	Minimum	Typical	Maximum	Note
Insertion Loss(*1)		2010 ~ 2025 MHz	dB	-	1.8	2.5
VSWR	Input	2010 ~ 2025 MHz	-	-	1.4	2.0
	Output		-	-	1.4	2.0
Attenuation:						
1 ~ 1925 MHz		dB	30	36	-	-
1925 ~ 1980 MHz		dB	20	26	-	-
2050 ~ 2085 MHz		dB	8	14	-	-
2085 ~ 2110 MHz		dB	25	27	-	
2110 ~ 2400 MHz		dB	27	34	-	-
2400 ~ 2500 MHz		dB	40	45	-	-
2500 ~ 4900 MHz		dB	30	36	-	-
4900 ~ 6000 MHz		dB	30	35	-	-

(*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:

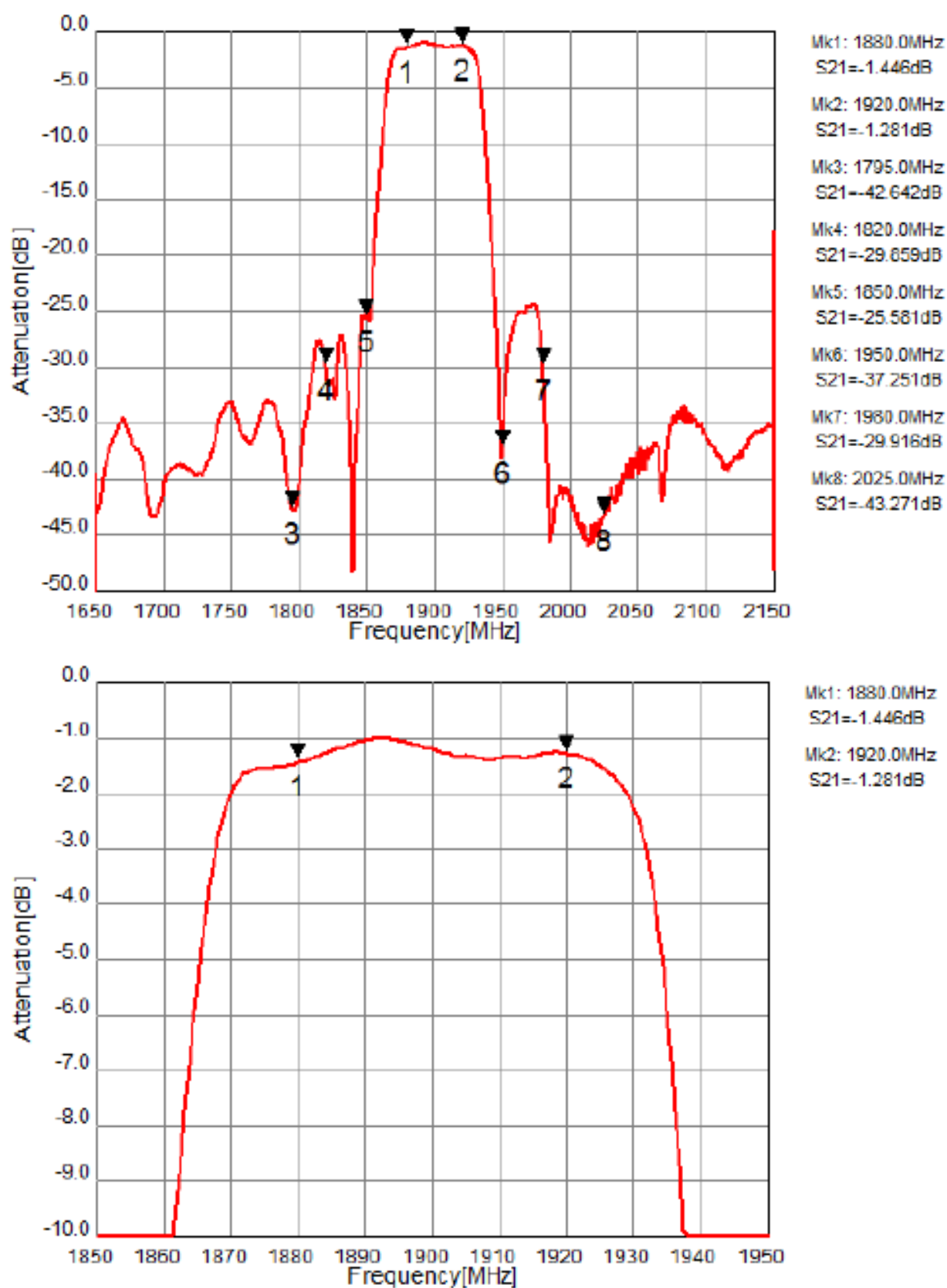


Fig.2 In-band Characteristics (Filter1)

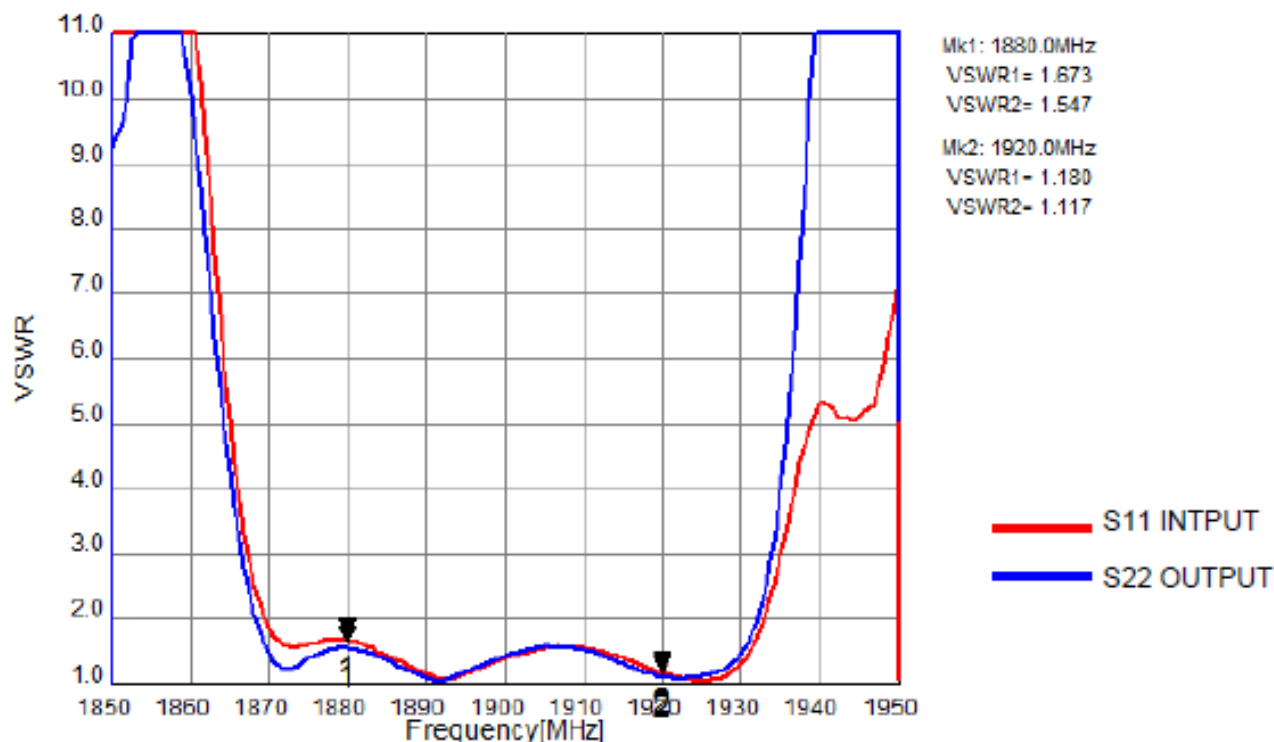


Fig. 3 VSWR (Filter1)

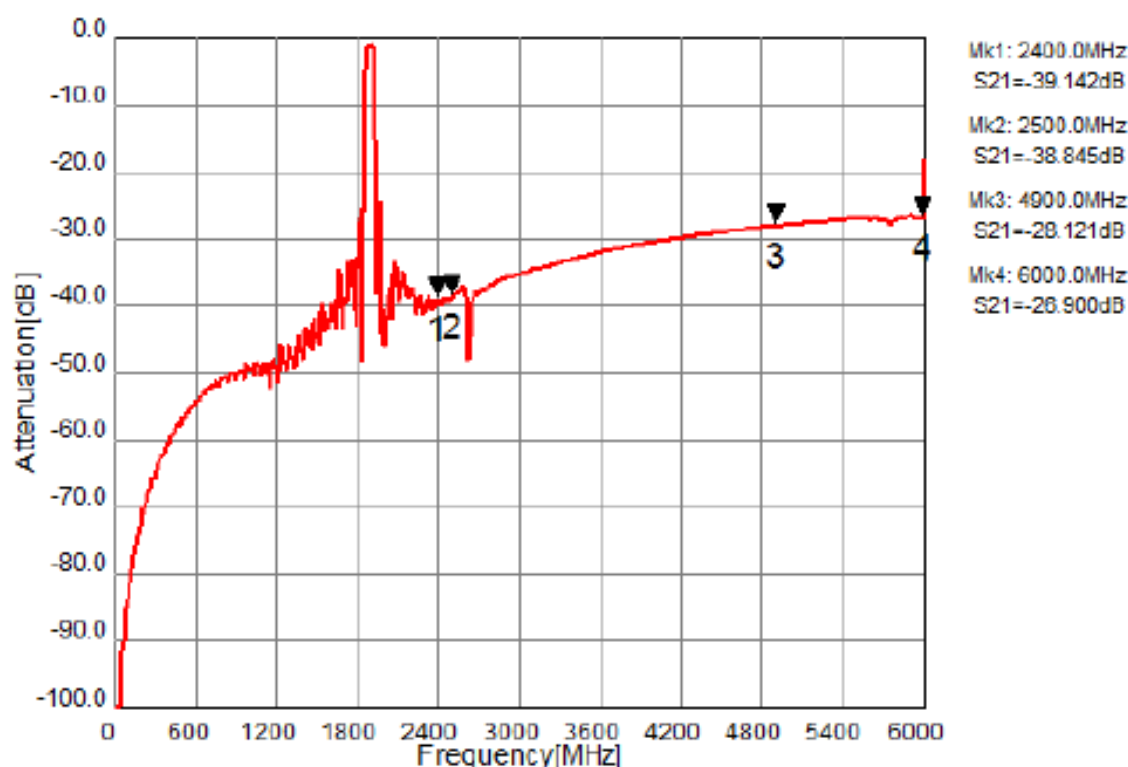


Fig.4 Wide-band Characteristic (Filter1)

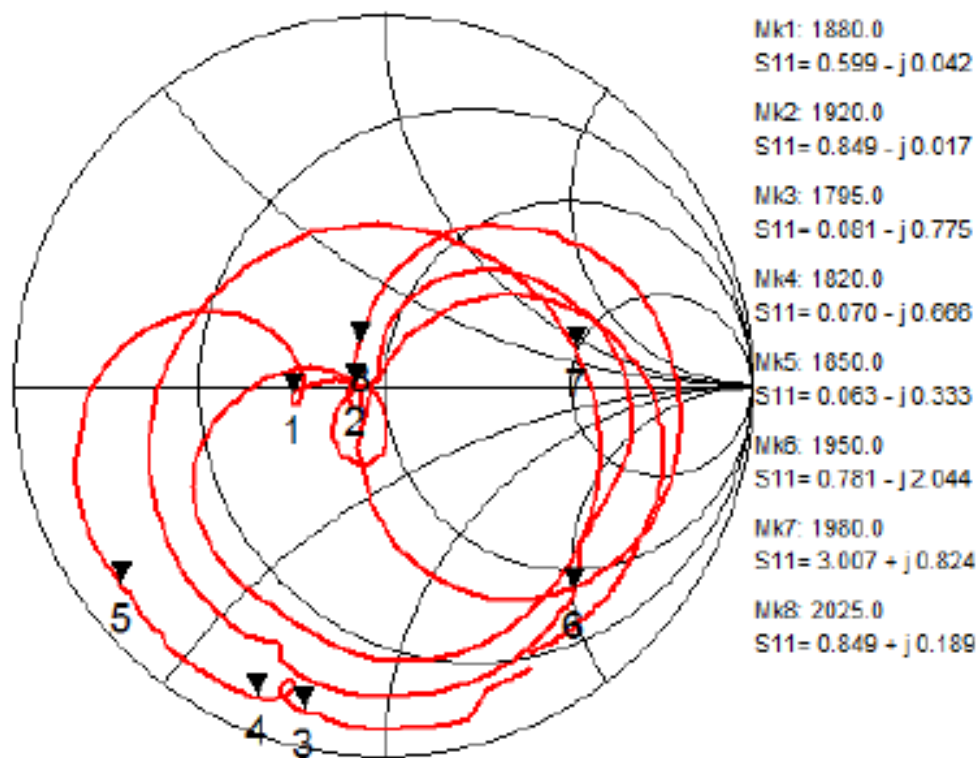


Fig.5 Impedance (INPUT) (Filter1)

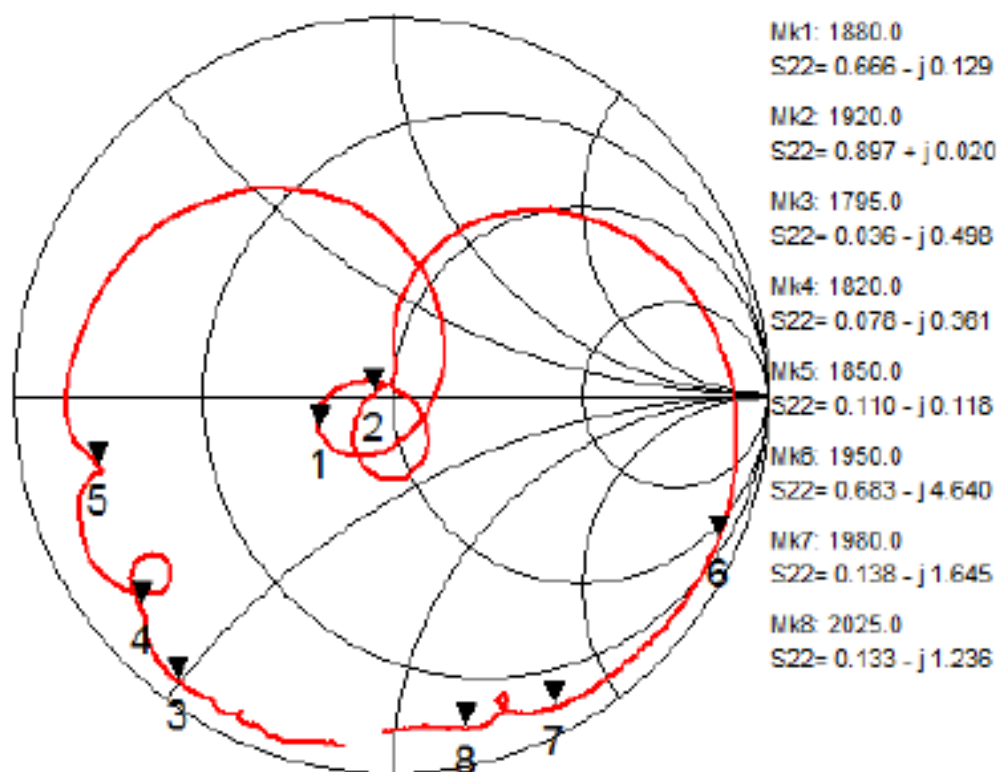


Fig.6 Impedance (OUTPUT) (Filter1)

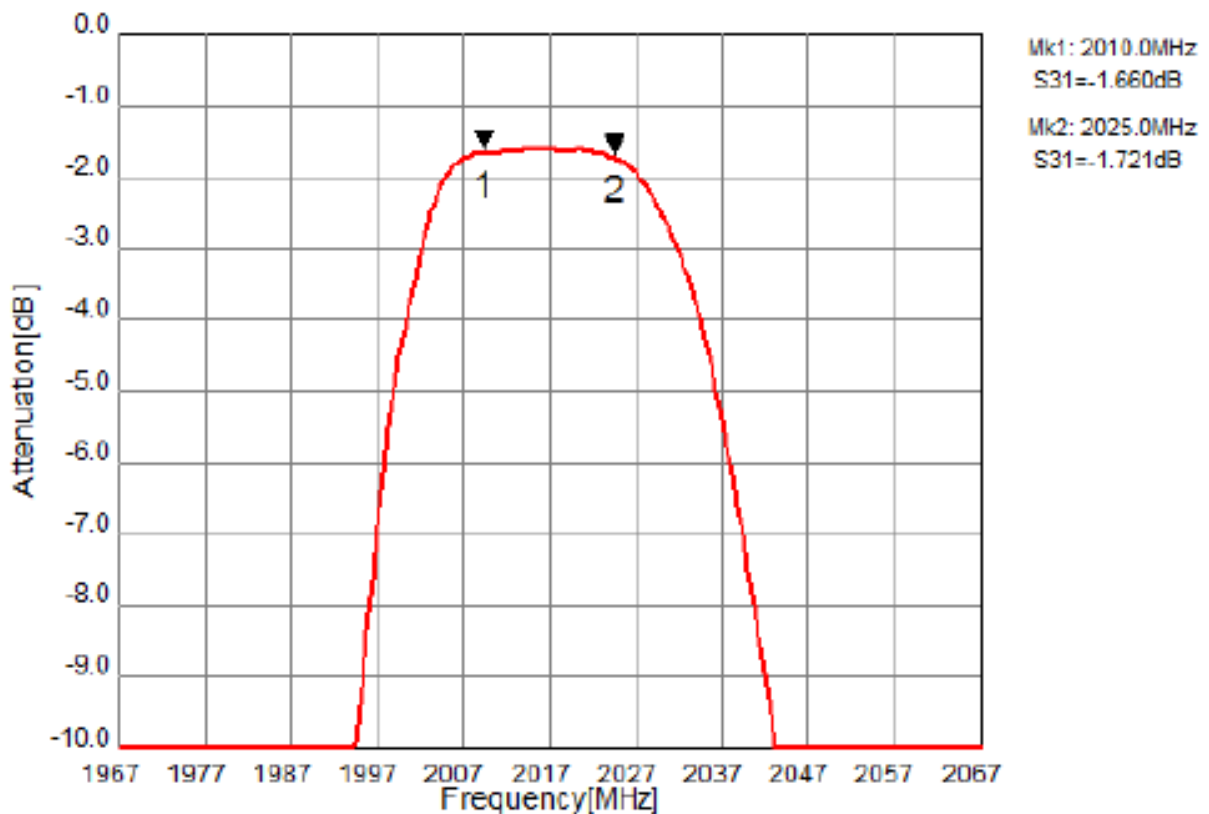
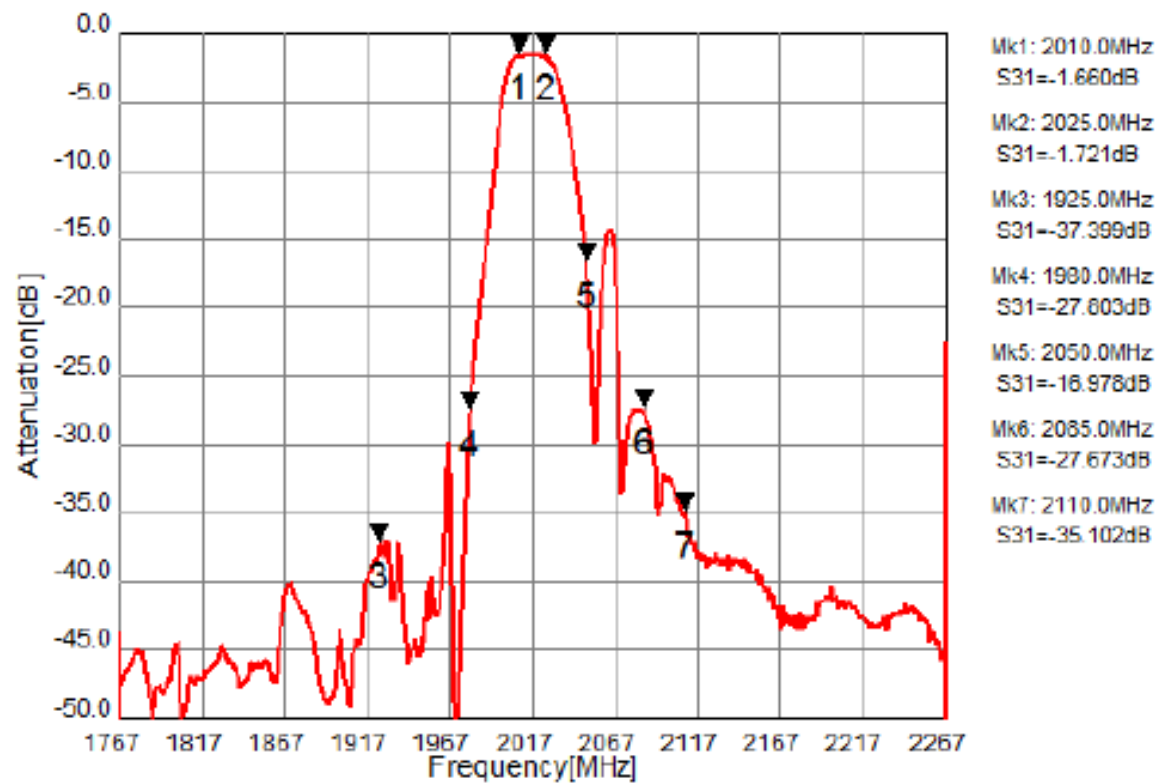


Fig.8 In-band Characteristics (Filter2)

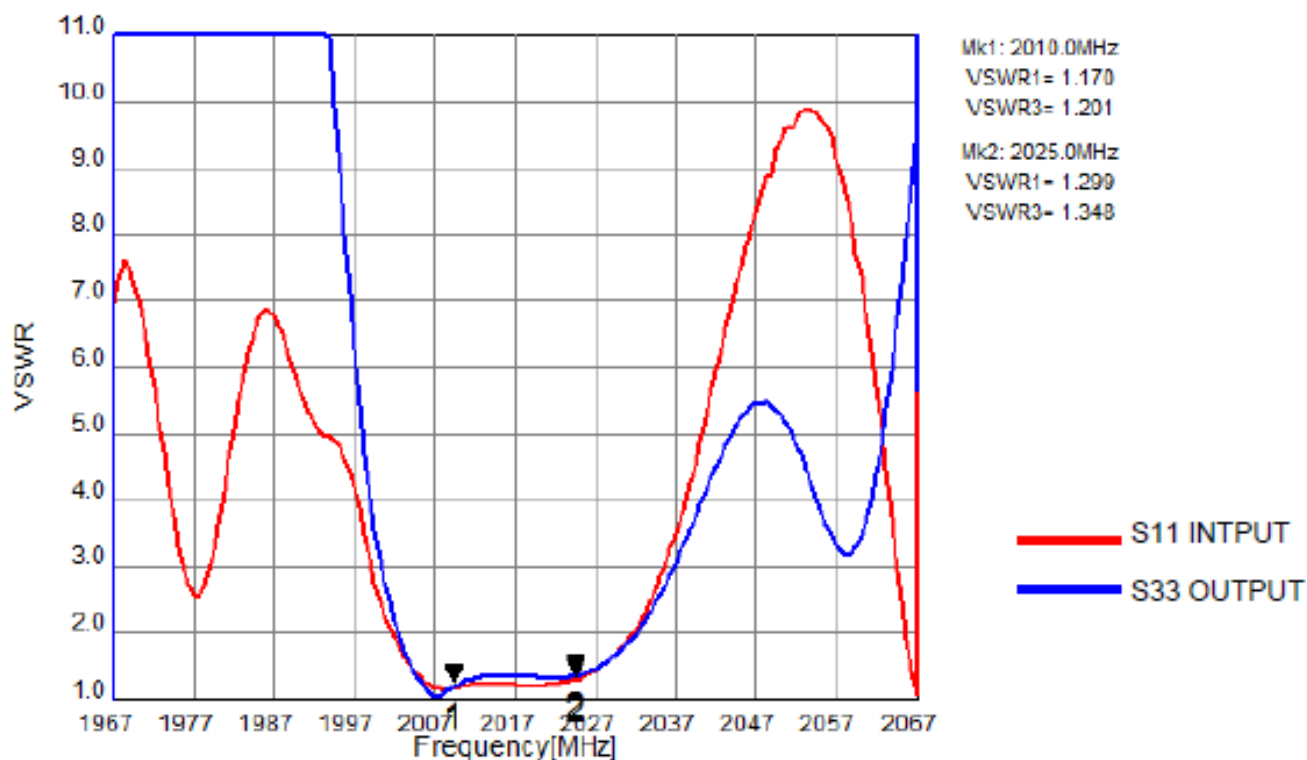


Fig.9 VSWR (Filter2)

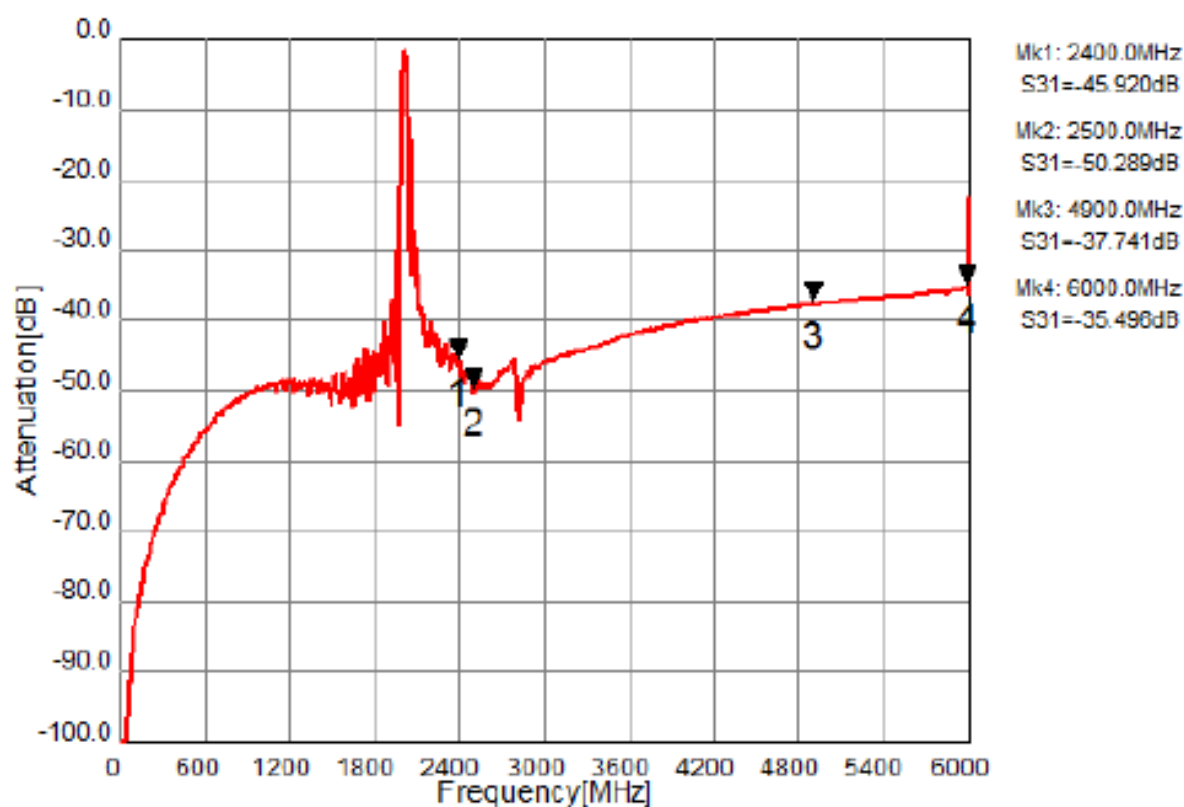


Fig.10 Wide-band Characteristic (Filter2)

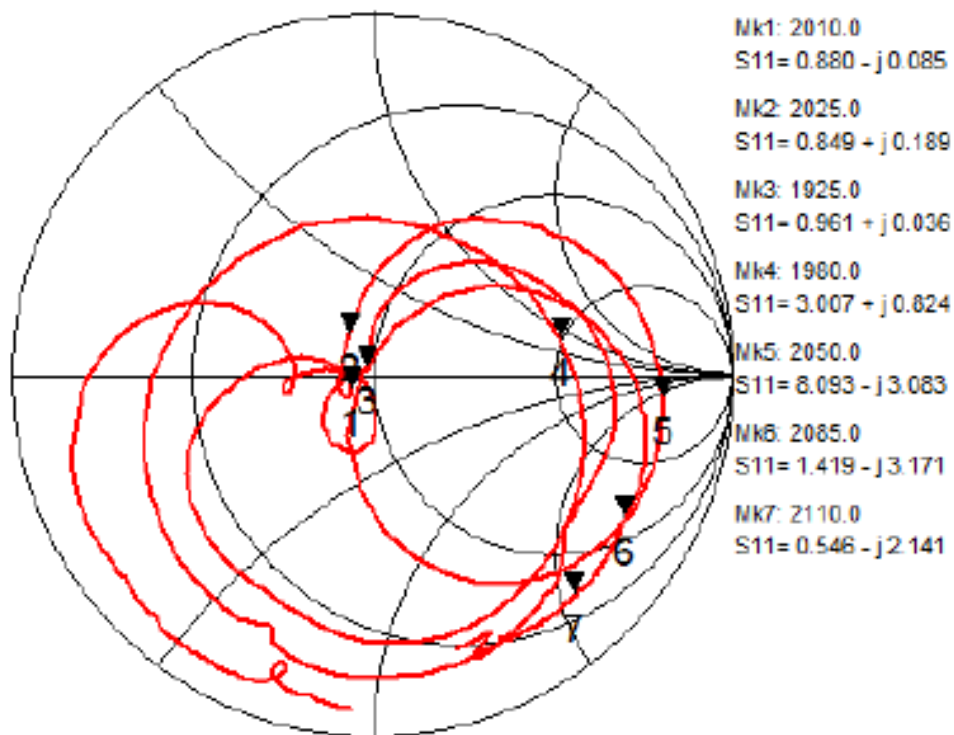


Fig.11 Impedance (INPUT) (Filter1)

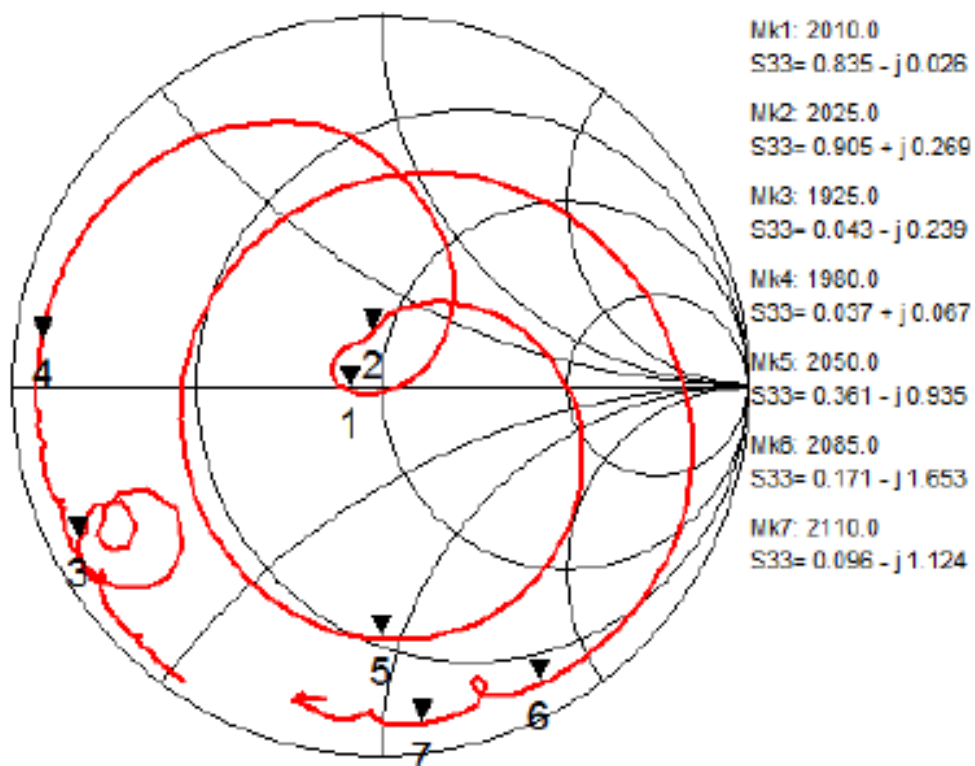
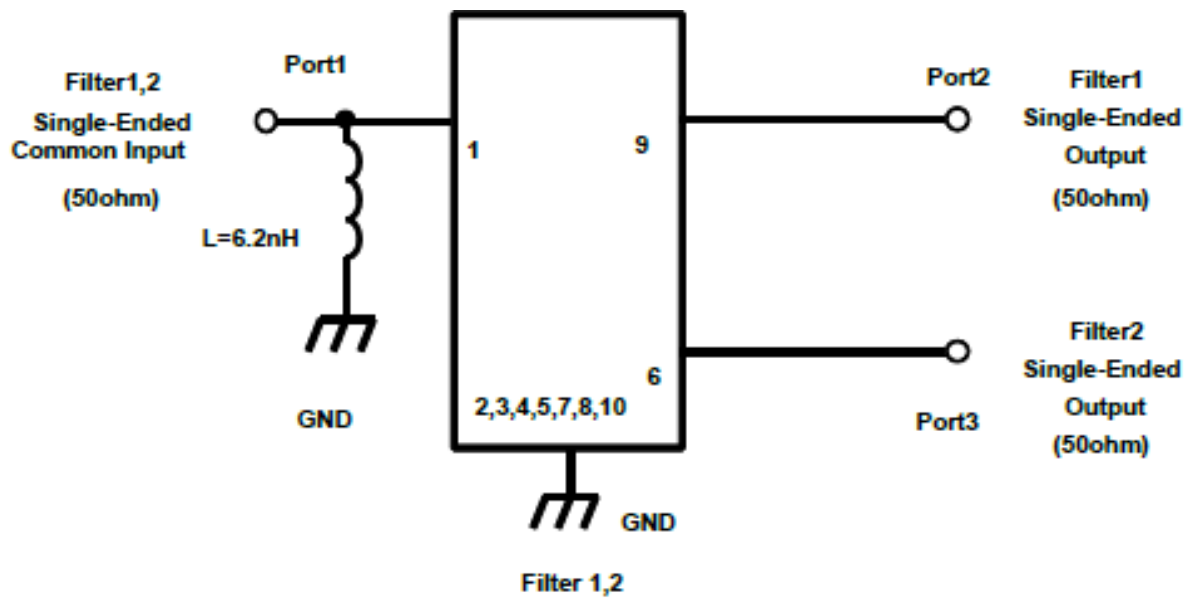
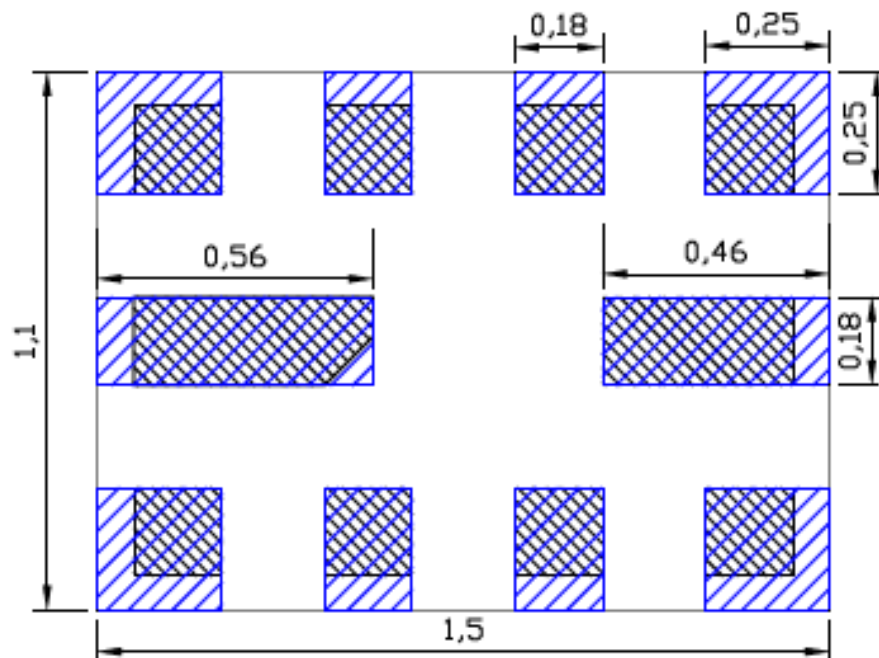


Fig.12 Impedance (OUTPUT) (Filter2)

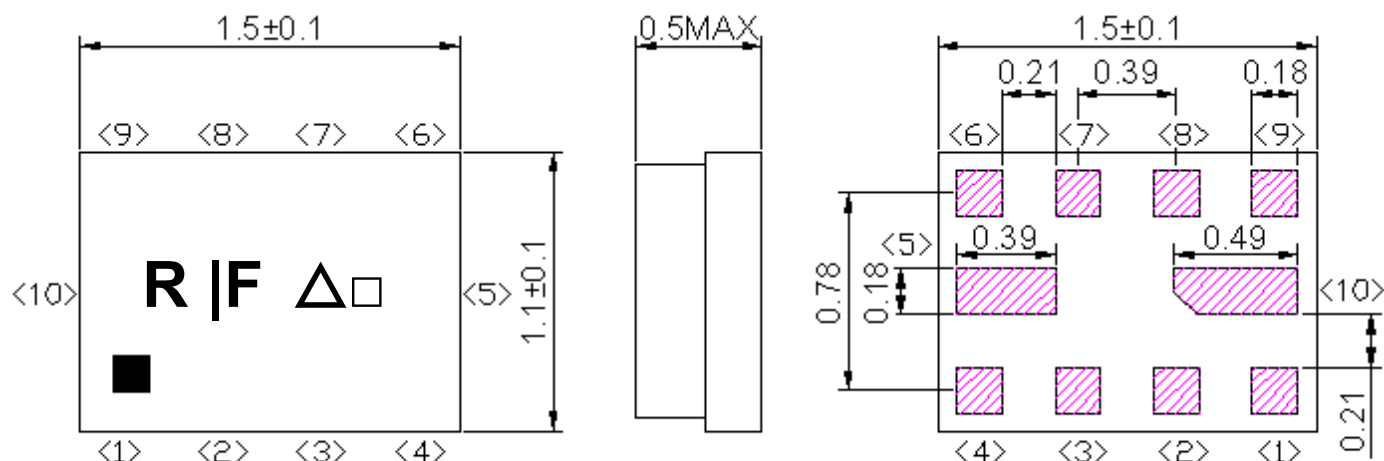
MEASUREMENT CIRCUIT:



FOOTPRINT:



OUTLINE DRAWING:



Not Specified Tolerance : ± 0.10 mm

Coplanarity : 0.1 mm max.

A to H : Pin No.

Unit : mm

Marking name : **RF**

Δ : Date code(2016 May $\rightarrow$ s ,....., 2019 Dec $\rightarrow$ m.)

$\square$: Lot Code.

Product Date Code. Follow below table.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z

Pin Configuration

Pin No.	Pin name	Description
1	IN	Filter1,2 input pin
2	GND	Ground
3	GND	Ground
4	GND	Ground
5	GND	Ground
6	OUT	Filter2 output pin
7	GND	Ground
8	GND	Ground
9	OUT	Filter1 output pin
10	GND	Ground

Filter No.	Passband(MHz)	System
1	1880 ~ 1920	Band39
2	2010 ~ 2025	Band34

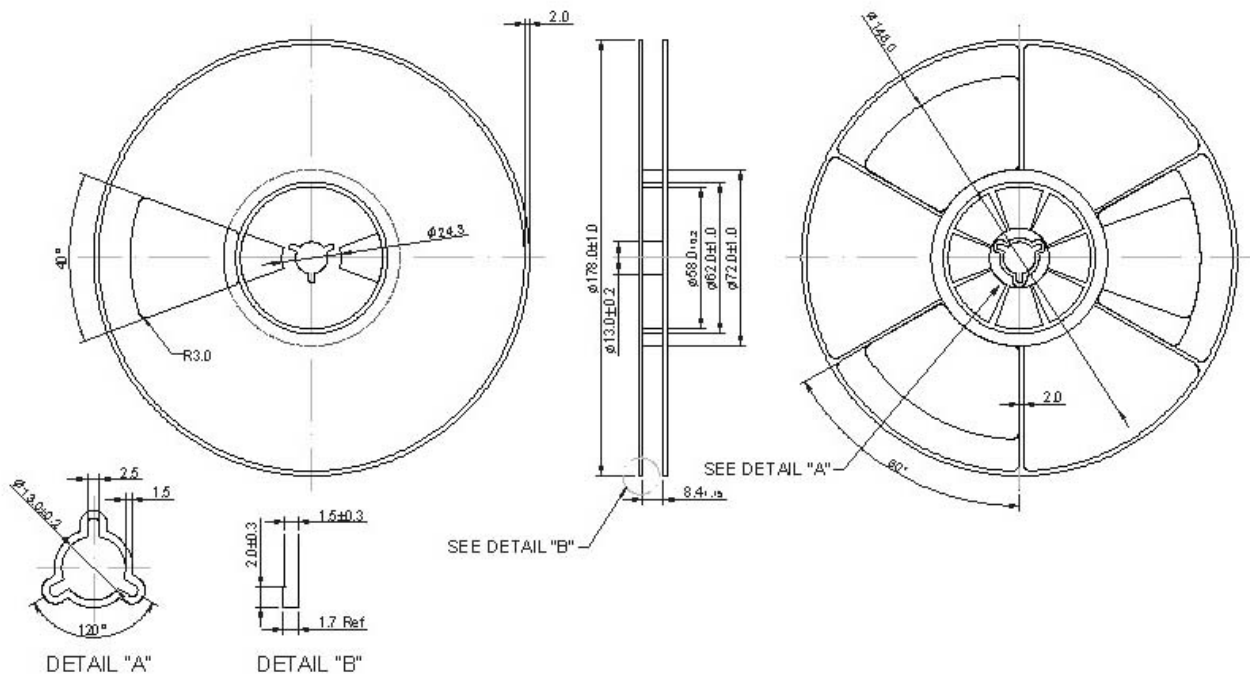
PACKING

REEL DIMENSION

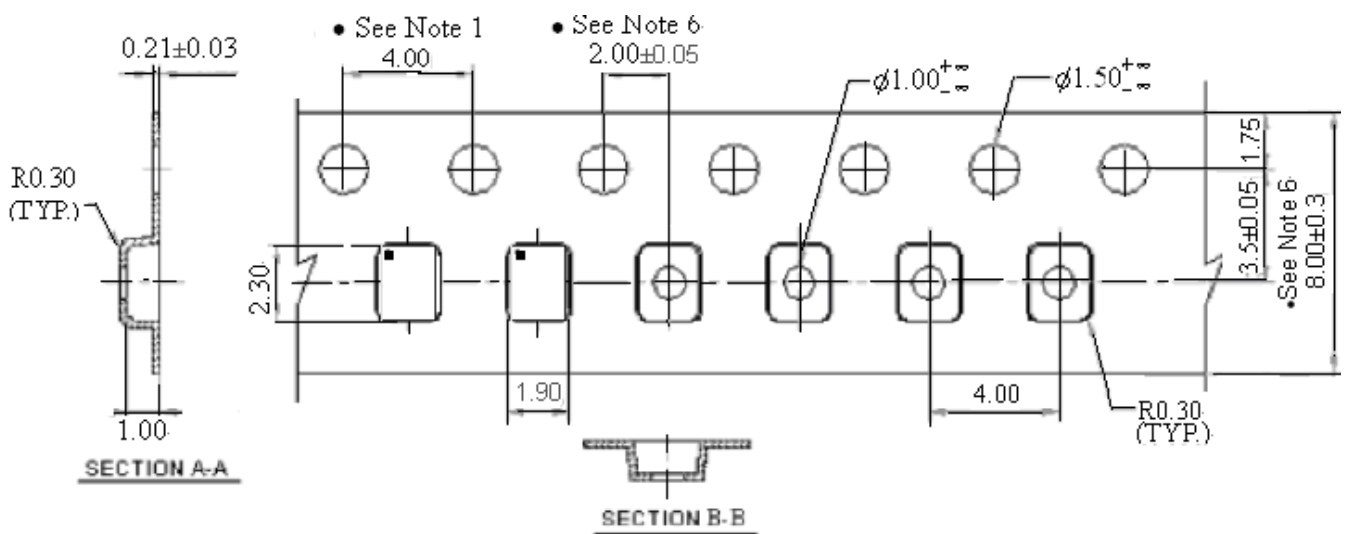
Reel Count:

7" = 3000

13" = 10,000



TAPE DIMENSION



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 260°C+0/-5°C peak (20~40sec).
4. Time: 2 times.

