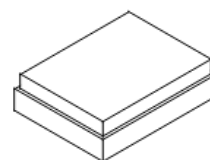


SF2605NA

MAXIMUM RATING:

- Input power : 29dBm (Ta=+50deg C,5000h,CW)
- Maximum DC Voltage: +/-5 V
- Operating temperature range: -40 °C to +85 °C
- Storage temperature range: -40 °C to +85 °C
- Moisture Sensitivity Level: Level 1 (MSL 1)
- ESD 50V(MM) 100V(HBM)
- AEC-Q200 Qualified

1745/2155 MHz Filter Duplexer



SM1814

ELECTRICAL CHARACTERISTICS:

Terminating impedance(Tx Port): 50 Ω//4.7nH (Ω) (Single-ended)

Terminating impedance(Rx Port): 50 Ω//3.6nH (Ω) (Single-ended)

Terminating impedance(Ant Port): 50//2.8nH (Ω) (Single-ended)

Tx to ANT

Parameters Description		Unit	Minimum	Typical	Maximum	Note
Insertion Loss	1710.48 ~ 1779.52 MHz	dB (*1)	-	2.0	2.8	-30 °C ~+85 °C
		dB (*1)		2.0	3.3	
Ripple	1710.48 ~ 1779.52 MHz	dB	-	1.1	1.9	-30 °C ~+85 °C
		dB		1.1	2.3	
VSWR	Tx	-	-	1.7	2.1	-30 °C ~+85 °C
				1.7	2.4	
	ANT			1.6	2.1	-30 °C ~+85 °C
		-	-	1.6	2.4	

Attenuation:

1559 ~ 1606 MHz	dB	38	44	-	-30 °C ~+85 °C
	dB	35	44		
2110.48 ~ 2199.52 MHz	dB	45	51	-	-
2400 ~ 2500 MHz	dB	40	47	-	-
3420 ~ 3560 MHz	dB	35	41	-	-
5130 ~ 5340 MHz	dB	28	39		-

ANT to Rx

Parameters Description			Unit	Minimum	Typical	Maximum	Note
Insertion Loss		2110.48 ~ 2199.52 MHz	dB(*1)	-	2.0	2.9	-30 °C ~+85 °C
			dB		2.0	3.3	
Ripple		2110.48 ~ 2199.52 MHz	dB	-	0.7	1.7	-30 °C ~+85 °C
			dB		0.7	2.1	
VSWR	ANT	2110.48 ~ 2199.52 MHz	-	-	1.5	2.3	-30 °C ~+85 °C
					1.5	2.5	
	Rx				1.3	2.2	-30 °C ~+85 °C
			-	-	1.3	2.4	
Attenuation:							
1710.48 ~ 1779.52 MHz			dB	45	53	-	
2400 ~ 2500 MHz			dB	33	40	-	
4220 ~ 4400 MHz			dB	33	48	-	

Tx to Rx

Isolation	1710.48 ~ 1779.52 MHz	dB	53	57	-	
	2110.48 ~ 2199.52 MHz	dB	50	54	-	

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

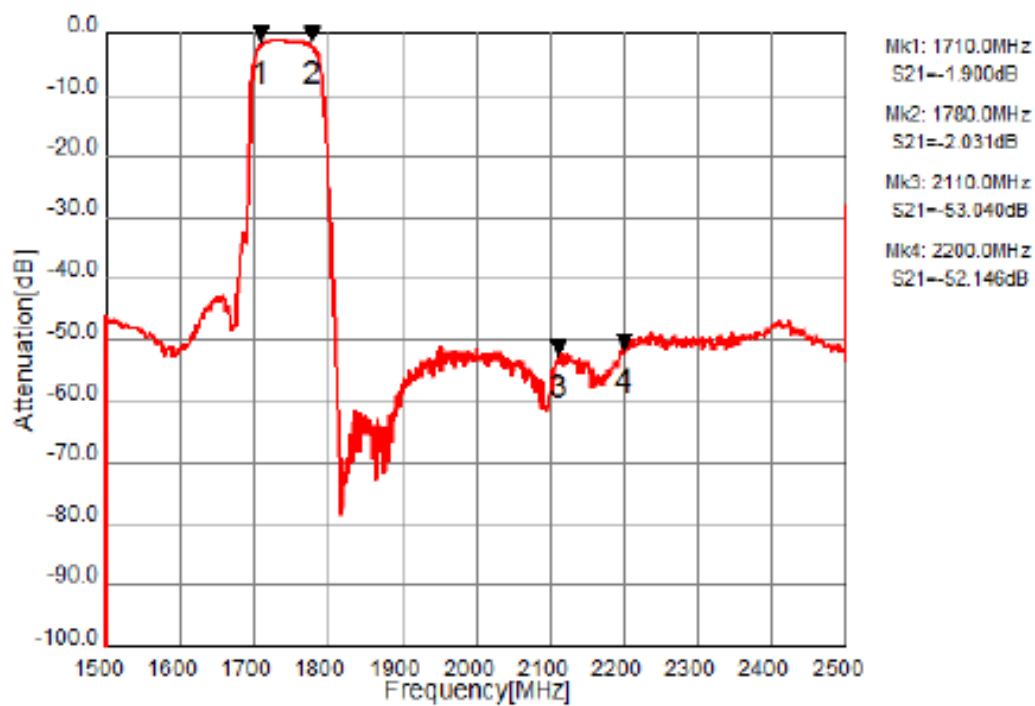


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

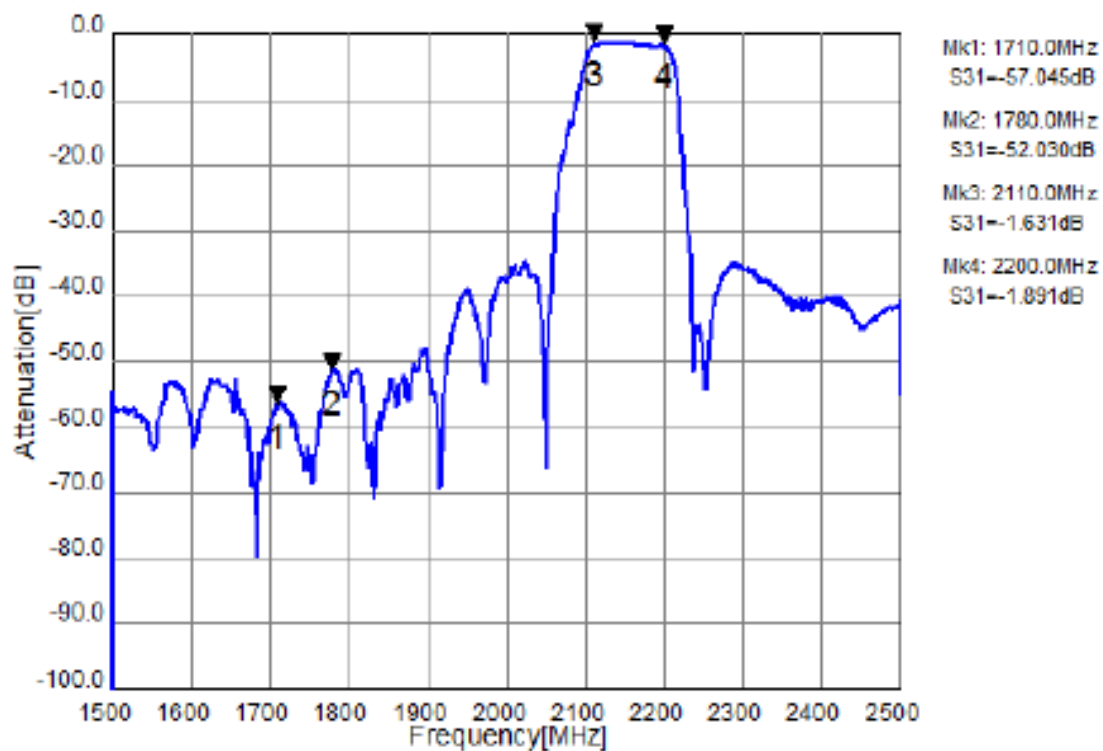
NOTES:

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.

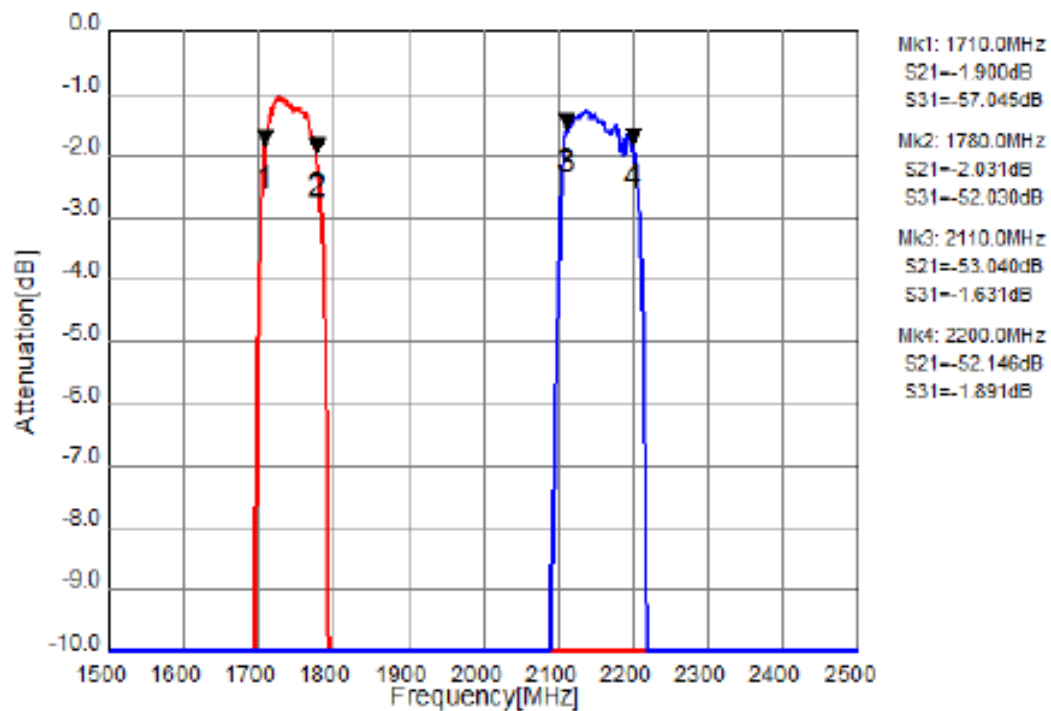
Tx to Ant



Ant to Rx



Tx to Ant, Ant to Rx



Tx to Rx Isolation

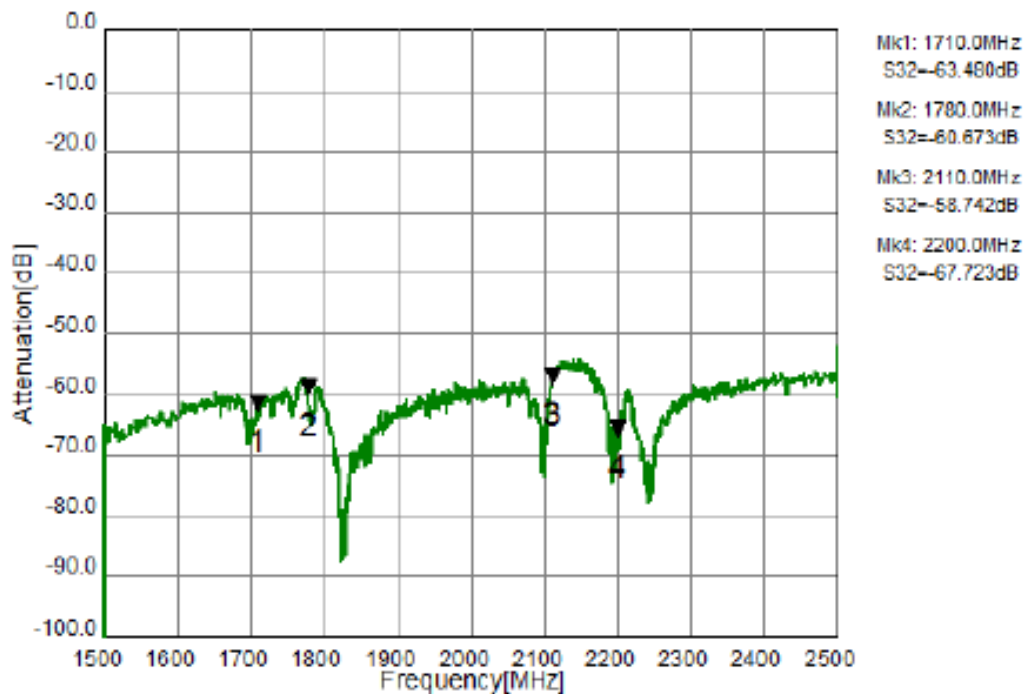
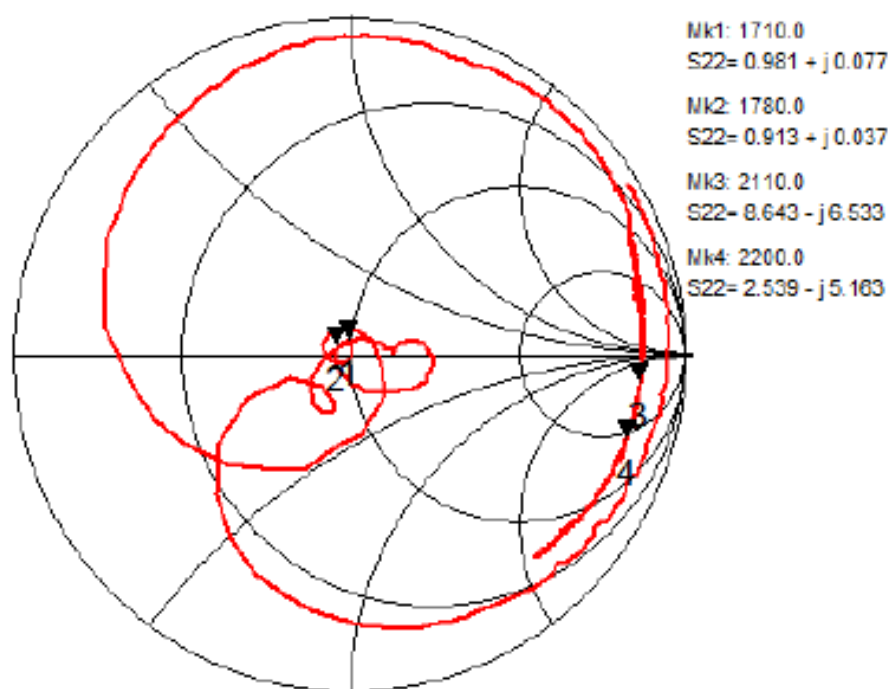
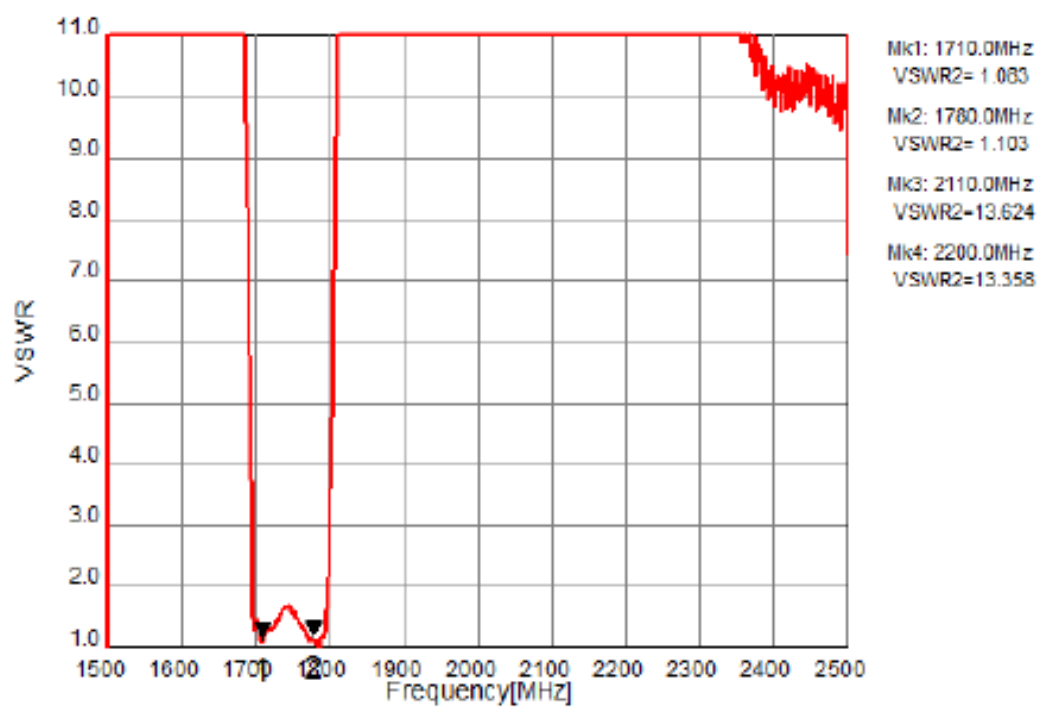


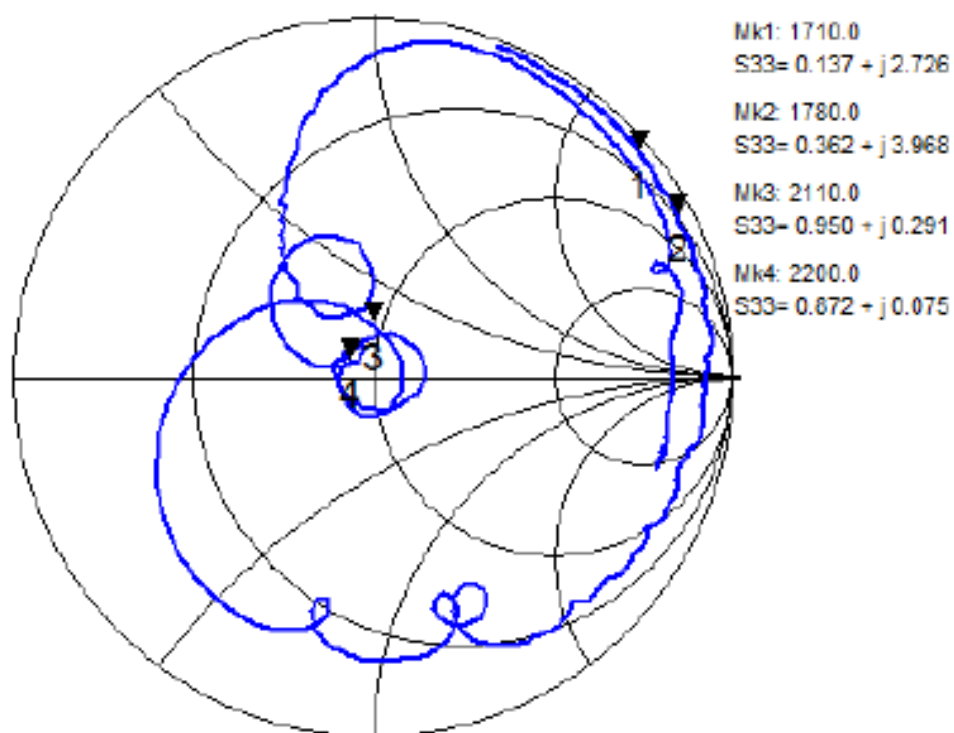
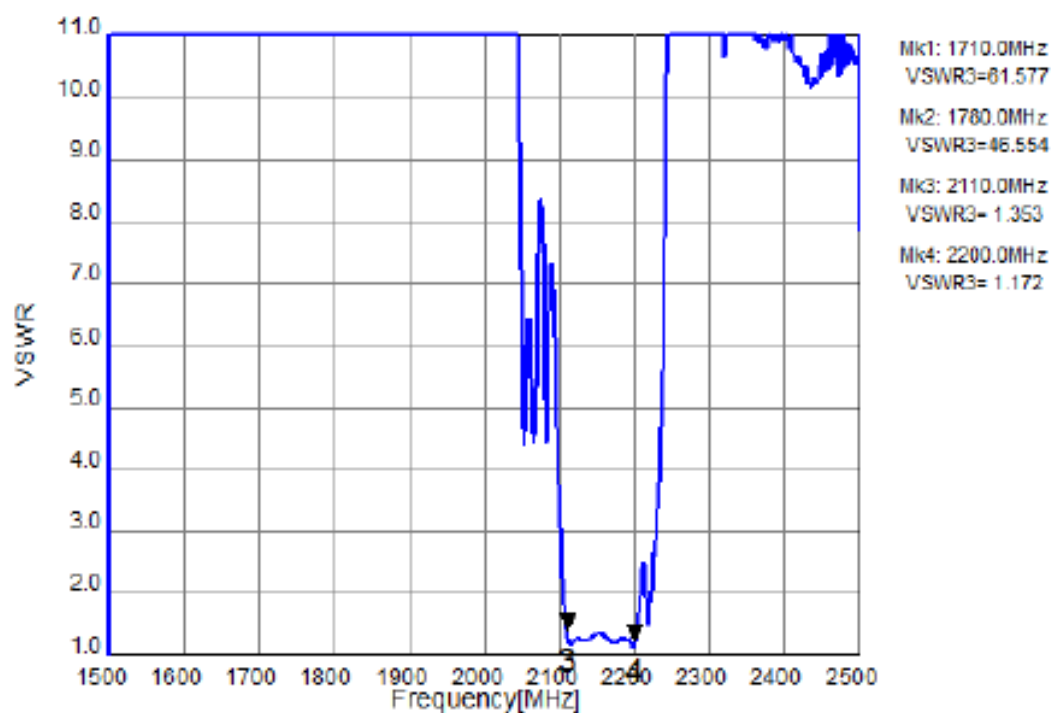
Figure 3-2.Electrical Characteristics

These data exclude loss that comes from the test board.

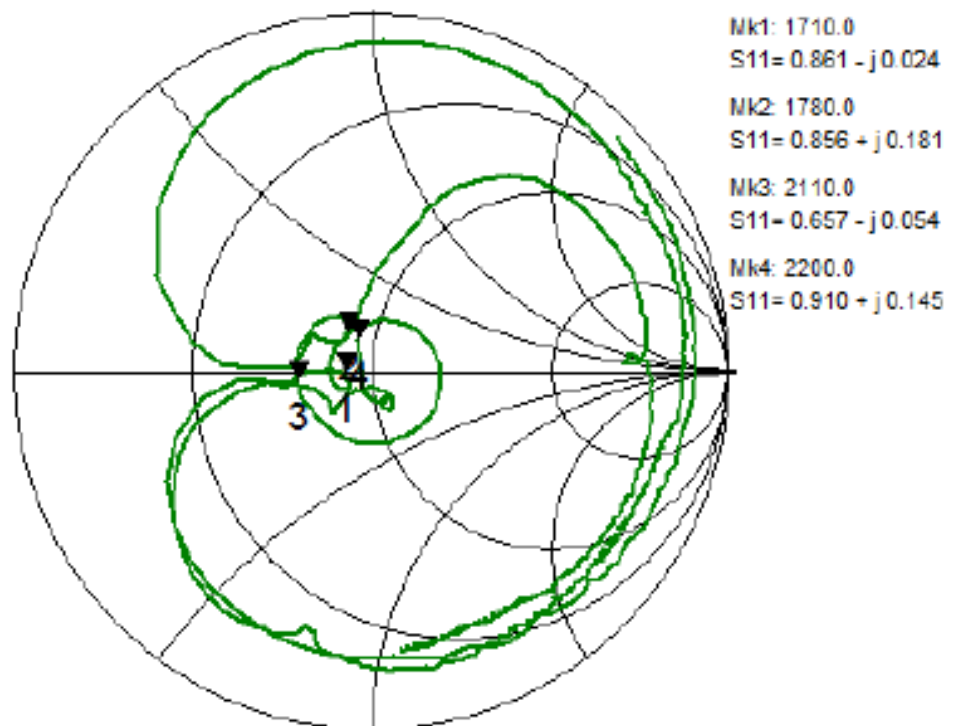
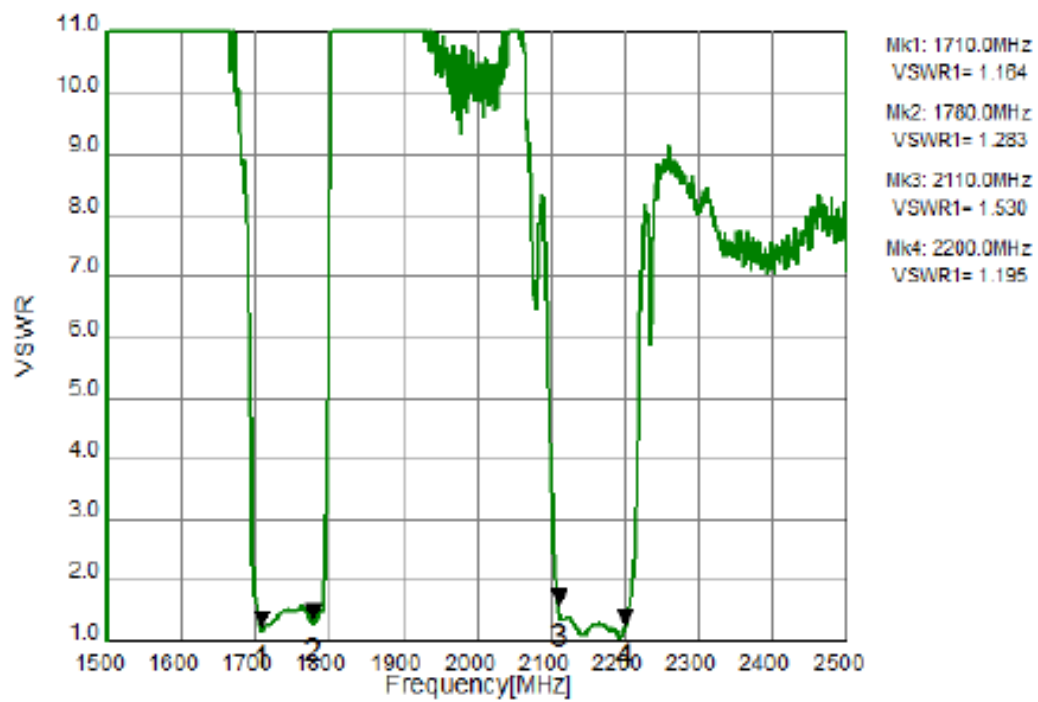
Tx Port



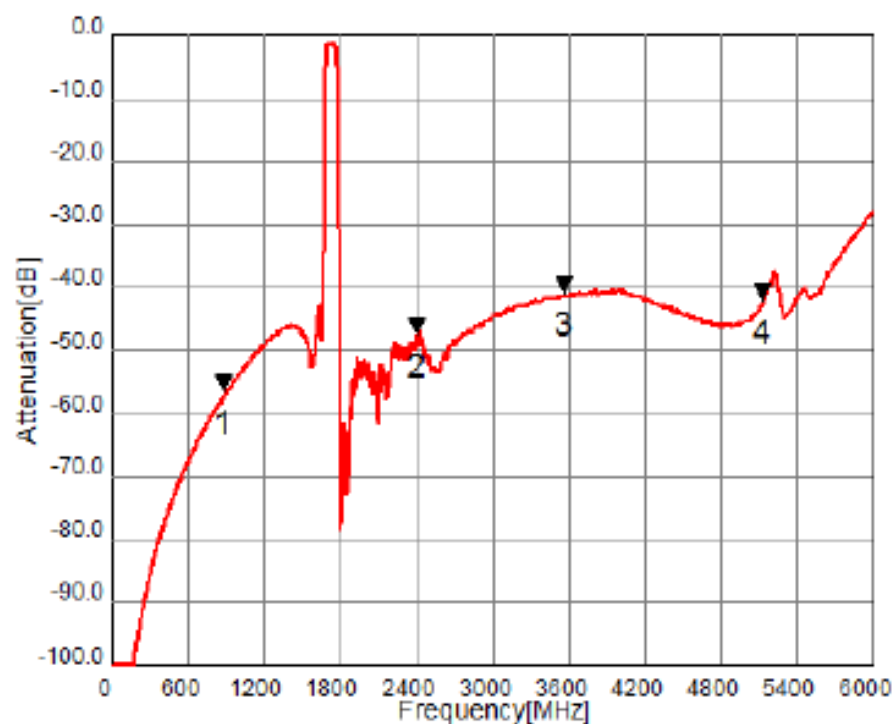
Rx Port



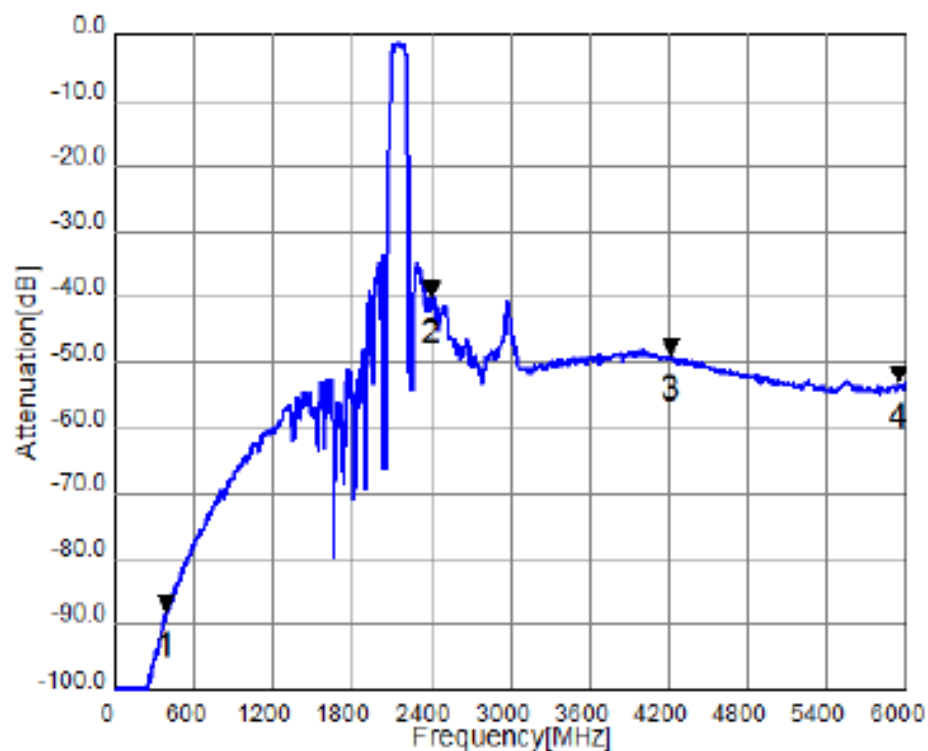
Ant Port



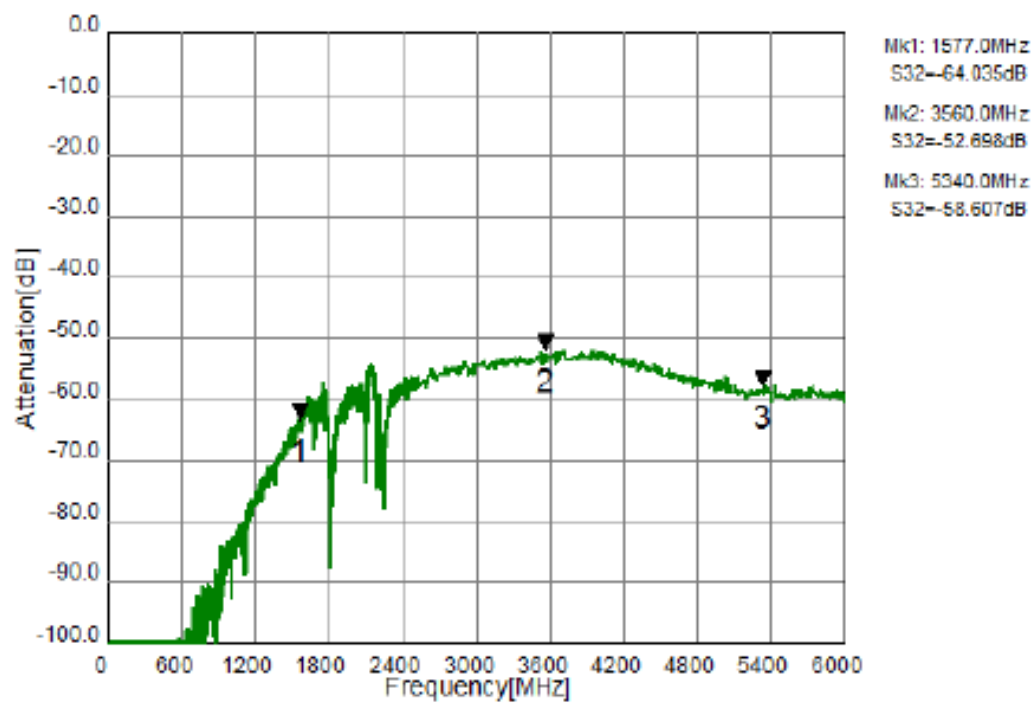
Tx to Ant(Wide span)



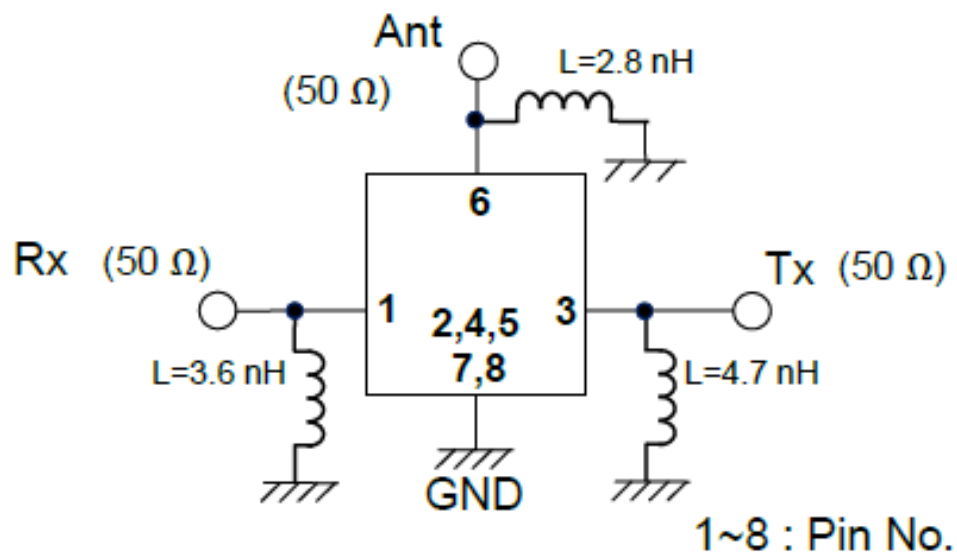
Ant to Rx(Wide span)



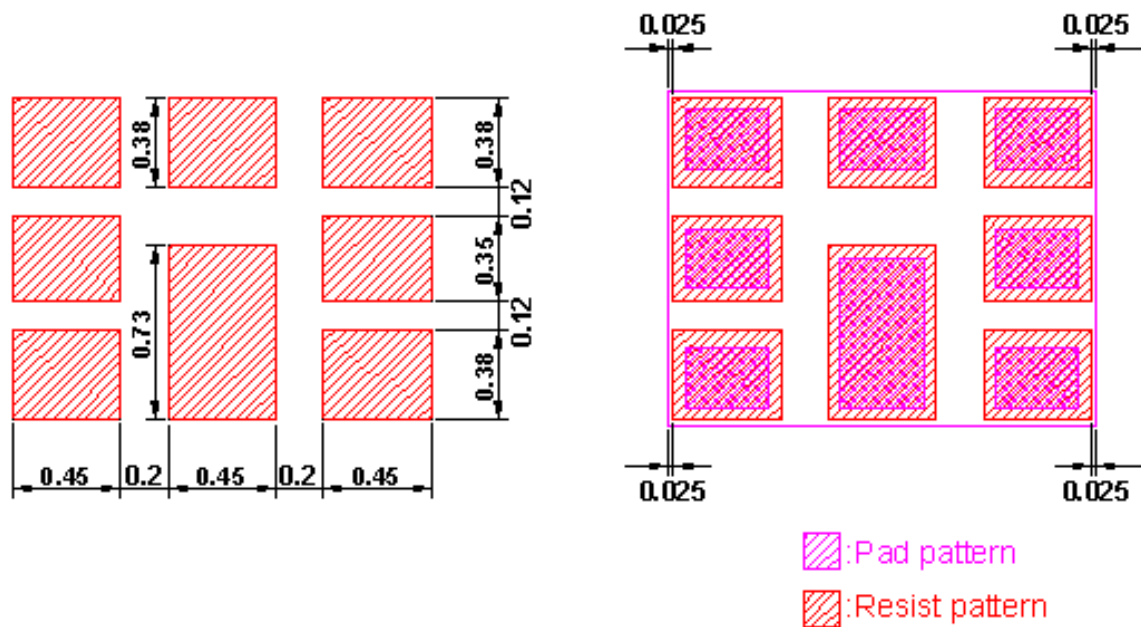
Tx to Rx Isolation(Wide span)



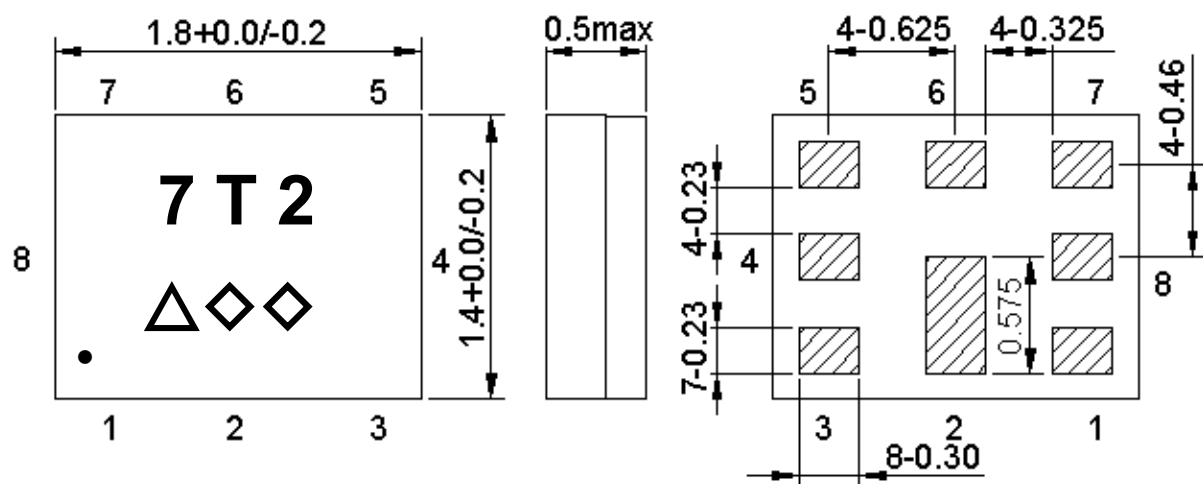
MEASUREMENT CIRCUIT:



PCB Footprint:



OUTLINE DRAWING: (Mass Production)



Marking name : T2

△: Date code(2016 May → s ,....., 2020 Dec→m.)

◇◇: Lot Code.

Product Date Code. Follow below table.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
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	D	E	F	G	H	J	K	L	M

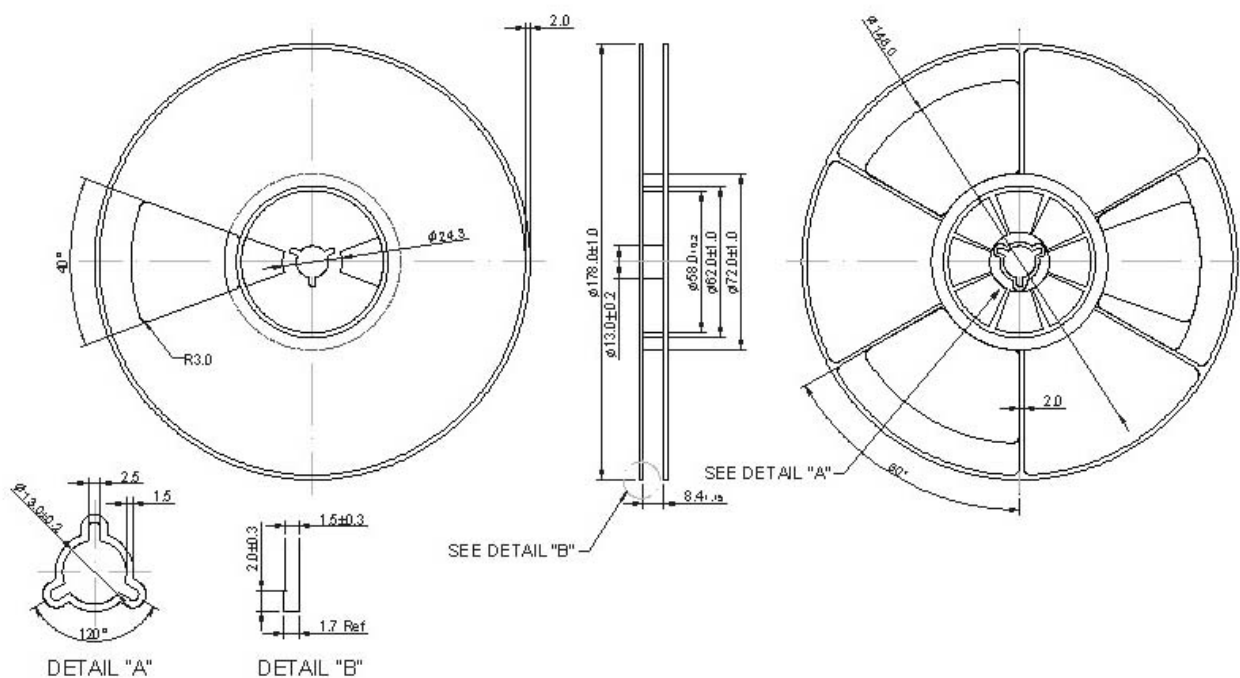
Pin assignment

Pin No.	Pin name	Description
1	Rx	Receiver
2	GND	Ground
3	Tx	Transmitter
4	GND	Ground
5	GND	Ground
6	Ant	Antenna
7	GND	Ground
8	GND	Ground

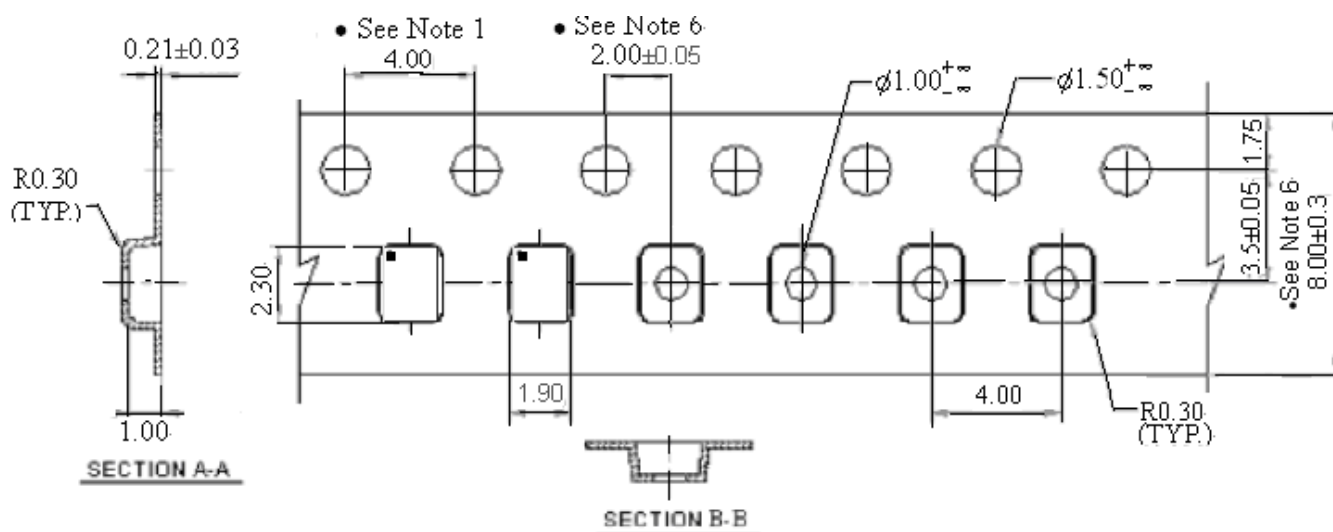
Figure 1.Dimensions and Pin assignment

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.

