



DATASHEET

-Preliminary-

Surface Acoustic Wave Filter

- **Application : UMTS DPX Band 4 (AWS)**
- **Model : SFXG33PY702**
- **Center Frequency : 1732.5 / 2132.5 [MHz]**



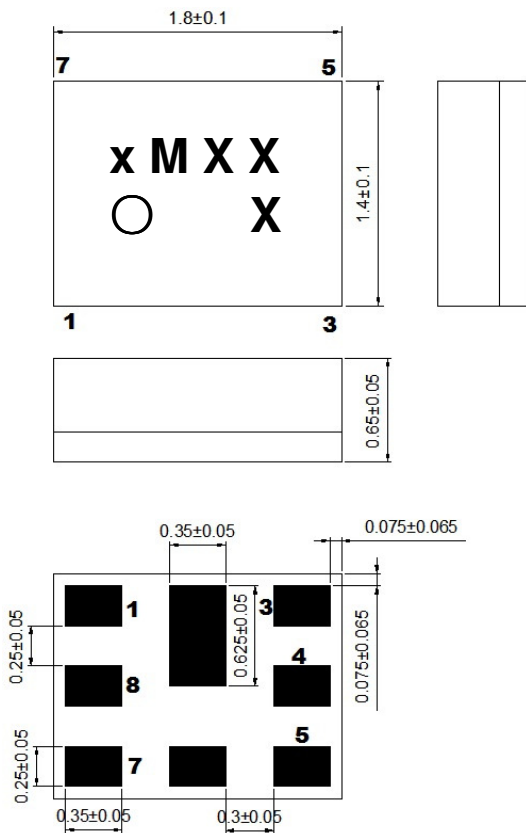
WISOL CO., LTD.

373-7, GAJANG-DONG, OSAN-SI,
GYUNGGI-DO, KOREA, 447-210

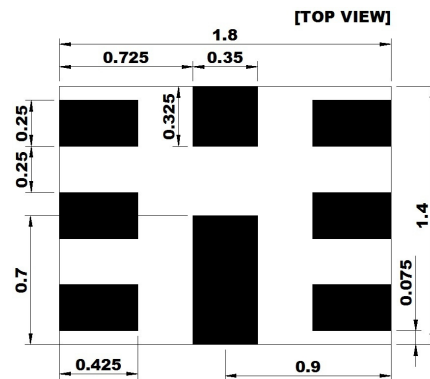
<http://www.wisol.co.kr>

1. OUTLINE DRAWING & RECOMMENDED PCB

< Outline Drawing >



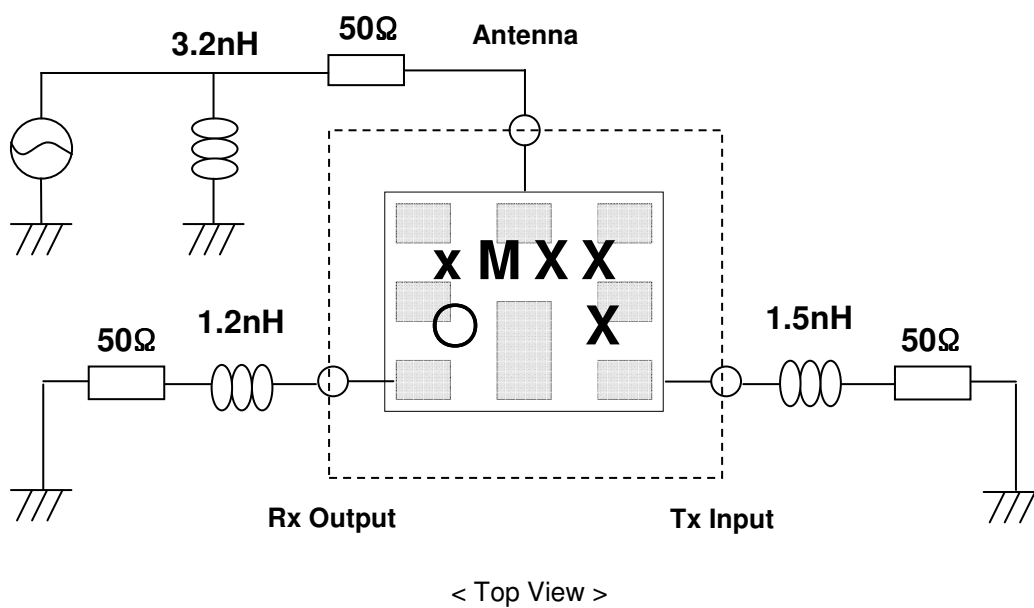
<Recommended PCB>



No.	Function
1	Rx Output
3	Tx Input
6	Antenna
2, 4, 5, 7, 8	GND

[Unit: mm]

2. TEST FIXTURE



3. PERFORMANCE

3-1. MAXIMUM RATINGS

CHARACTERISTICS	RATINGS	UNITS
DC Permissive Voltage	5	V
Maximum Input Power	0.8	W
Operating Temperature Range	-30 ~ +85	°C
Storage Temperature Range	-40 ~ +85	°C

3-2. ELECTRICAL CHARACTERISTICS

3-2-1. TABLE

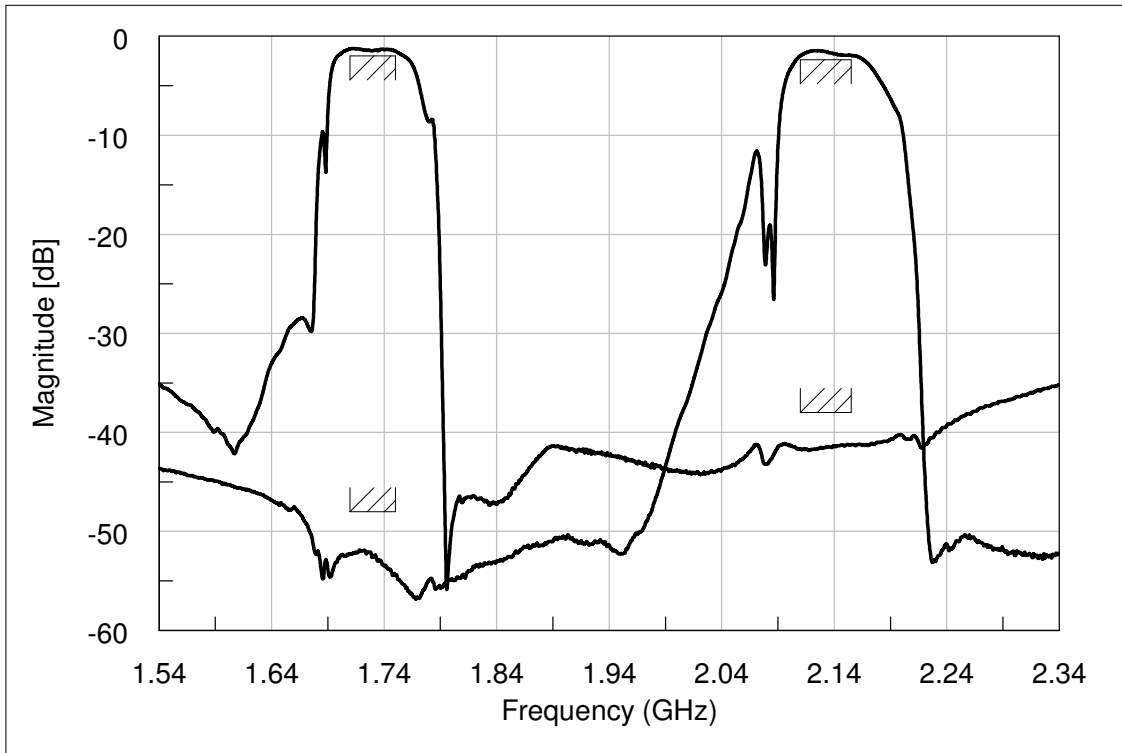
TX → ANTENNA, ANTENNA → RX

Ta = -30 ~ +85°C

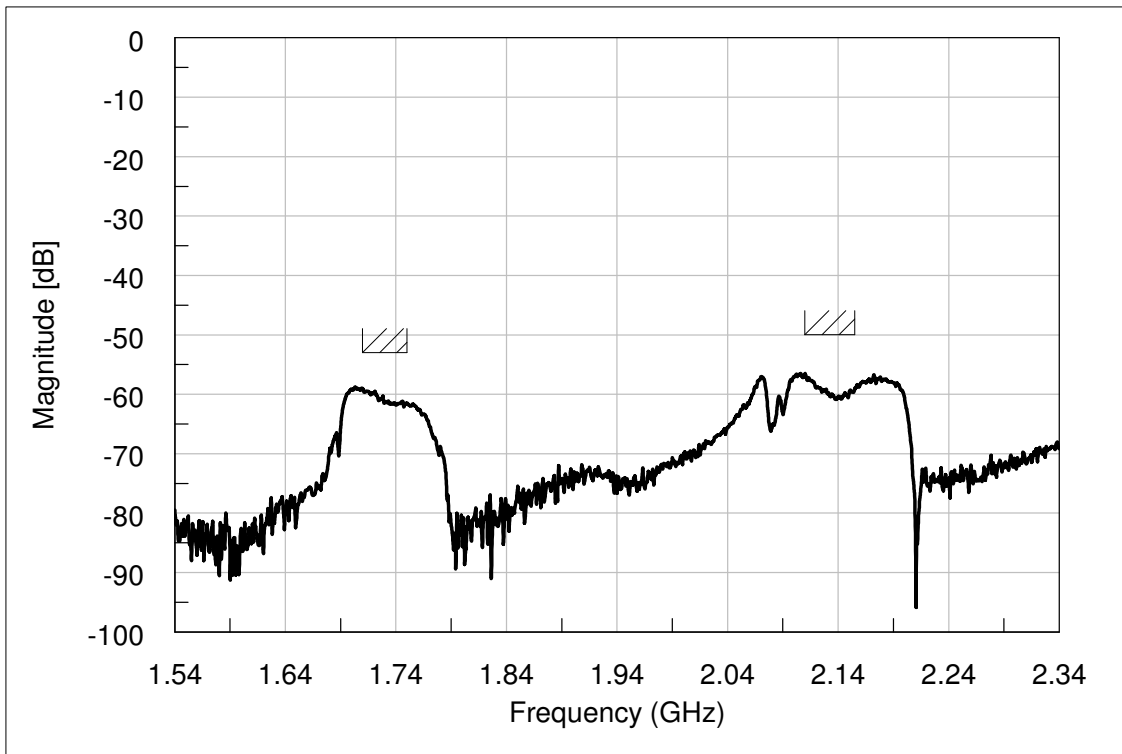
Item	CONDITION [MHz]	UNIT	RATING		
			Min.	Typ.(25°C)	Max.
TX → ANTENNA					
Insertion Loss	1710 ~ 1755	dB	-	1.5	2.0
Inband Ripple	1710 ~ 1755	dB	-	0.4	1.0
VSWR(Tx)	1710 ~ 1755	-	-	1.5	2.0
VSWR(Ant)	1710 ~ 1755	-	-	1.6	2.0
Absolute Attenuation	10 ~ 894	dB	30	37	-
	1565 ~ 1605	dB	30	37	-
	1805 ~ 1880	dB	22	42	-
	1930 ~ 1990	dB	34	42	-
	2110 ~ 2155	dB	38	41	-
	3410 ~ 3520	dB	20	25	-
Termination Impedance : Tx / ANTENNA		50Ω(1.5[nH]) / 50Ω(// 3.2[nH])			
ANTENNA → RX					
Insertion Loss	2110 ~ 2155	dB	-	1.9	2.4
Inband Ripple	2110 ~ 2155	dB	-	0.5	1.0
VSWR(Rx)	2110 ~ 2155	-	-	1.8	2.2
VSWR(Ant)	2110 ~ 2155	-	-	1.5	2.0
Absolute Attenuation	10 ~ 1710	dB	35	42	-
	1710 ~ 1755	dB	48	52	-
	2240 ~ 2484	dB	25	49	-
	2484 ~ 4310	dB	6	11	-
Termination Impedance : ANT / Rx		50Ω(// 3.2[nH]) / 50Ω(1.2[nH])			
TX → RX					
Isolation between Rx and Tx	1710 ~ 1755	dB	53	60	-
	2110 ~ 2155	dB	50	57	-

3-2-2. GRAPH

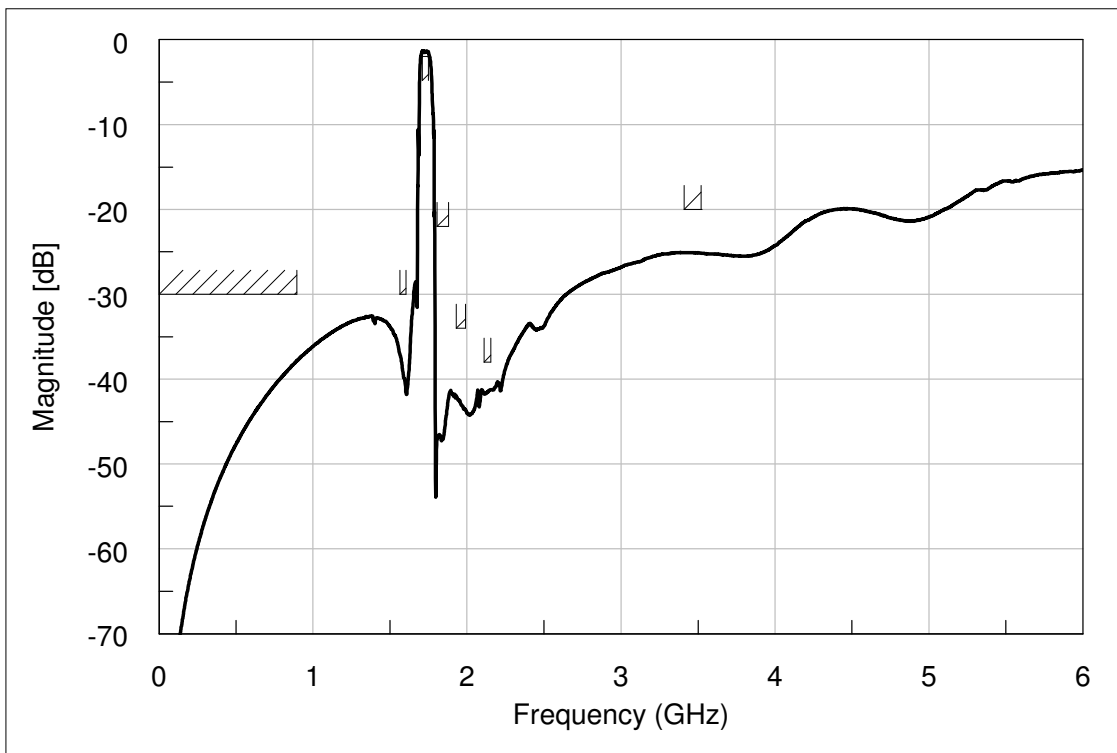
Tx→Ant, Ant→Rx Transmission Characteristics



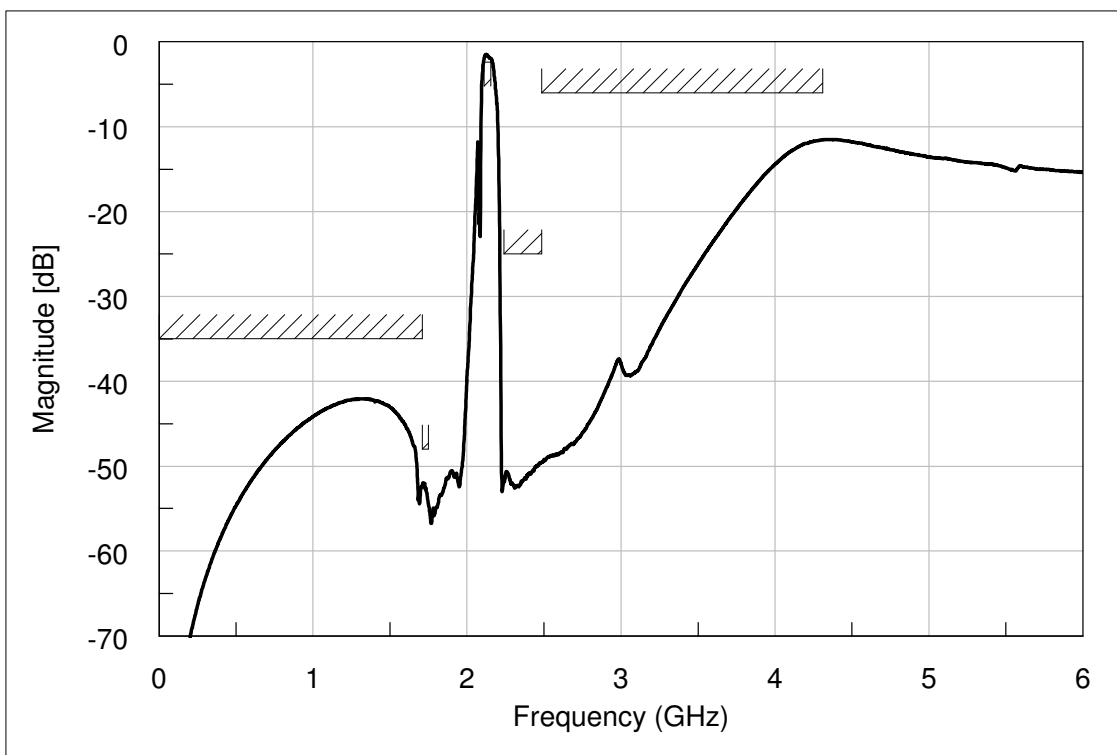
Tx→Rx Isolation Characteristics



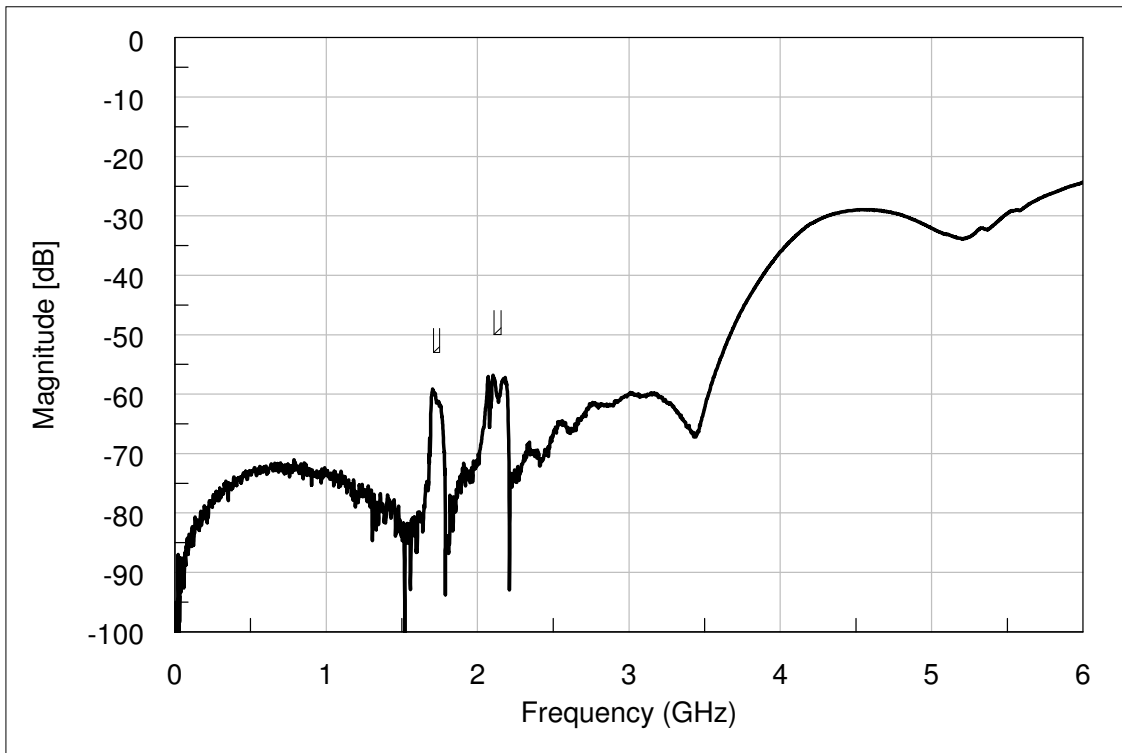
Tx→Ant Full Band Transmission Characteristics



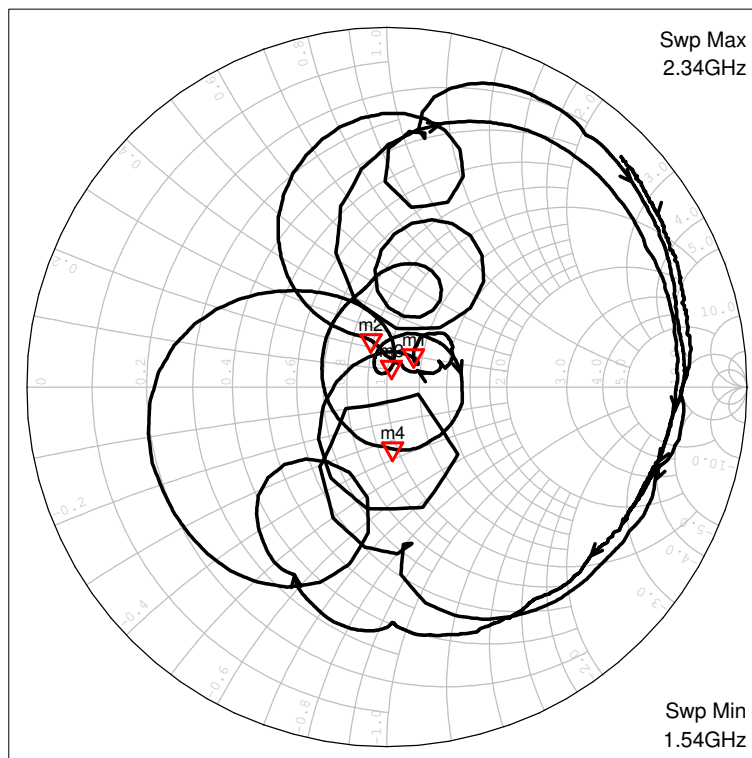
Ant→Rx Full Band Transmission Characteristics



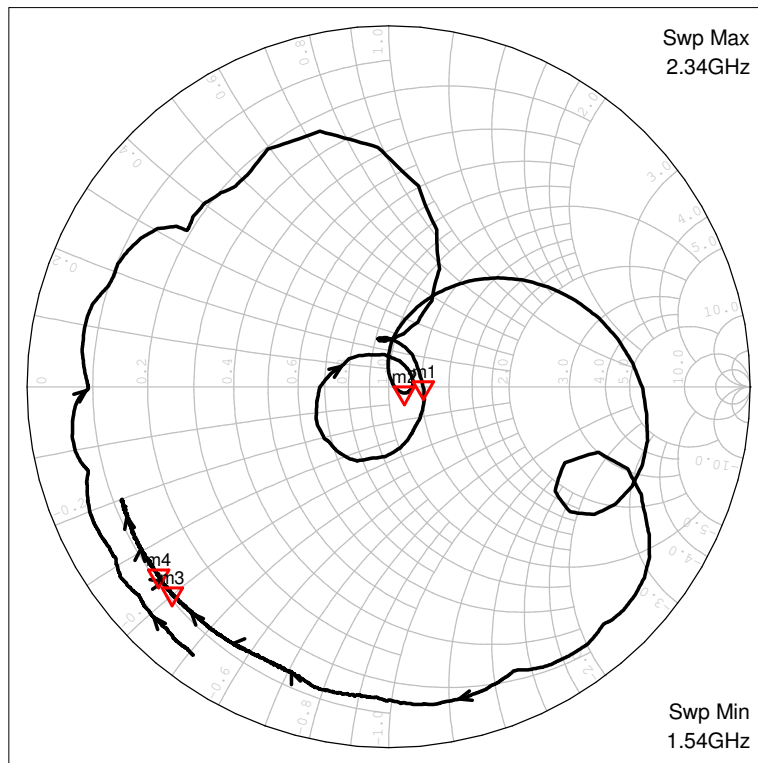
Tx→Rx Full Band Transmission Characteristics



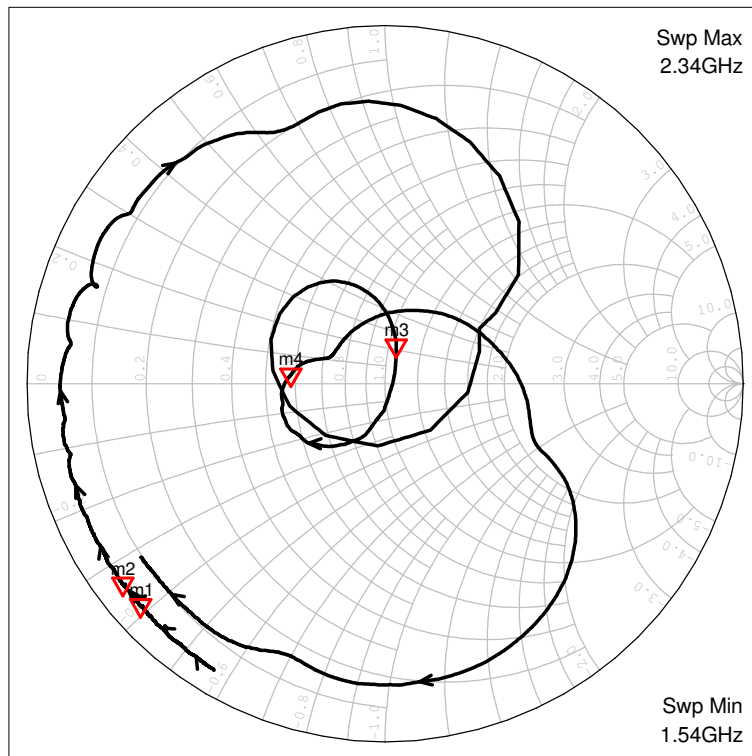
ANT port Smith Chart



Tx port Smith Chart



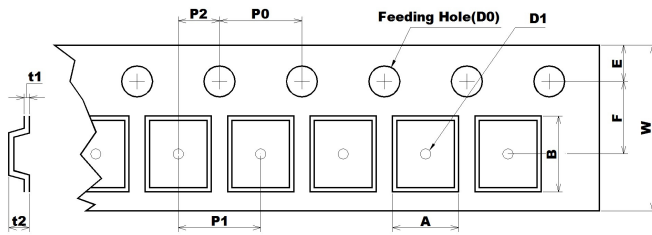
Rx port Smith Chart



4. PACKING

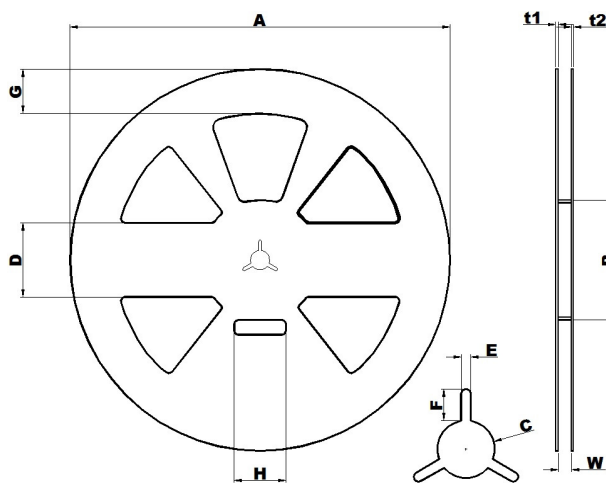
4-1. DIMENSIONS

- Carrier Tape [Unit: mm]



A	B	D0	D1
1.65 +0.05	2.10 +0.05	Ø1.50 +0.10 -0.00	Ø1.00 +0.25 -0.00
E	F	P0	P1
1.75 +0.10	3.50 +0.05	4.00 +0.10	4.00 +0.10
P2	t1	t2	W
2.00 +0.05	0.254 +0.02	1.00 +0.02	8.00 +0.30 -0.10

- Reel [Unit: mm]



A	B	C	D
Ø258.0 +1.0 -0.5	Ø81.0 +1.0	Ø13.0 +0.5	50.0 +0.8
E	F	G	H
2.2 +0.3	7.0 +0.5	30.0 +0.8	35.0 +1.0
t1	t2	W	
1.8 +0.5	1.5 +0.5	9.0 +1.0 -0.5	

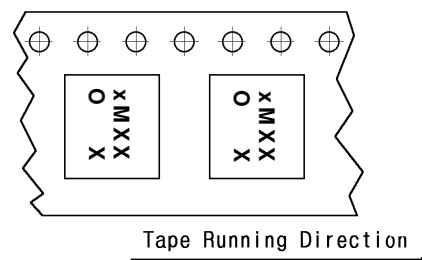
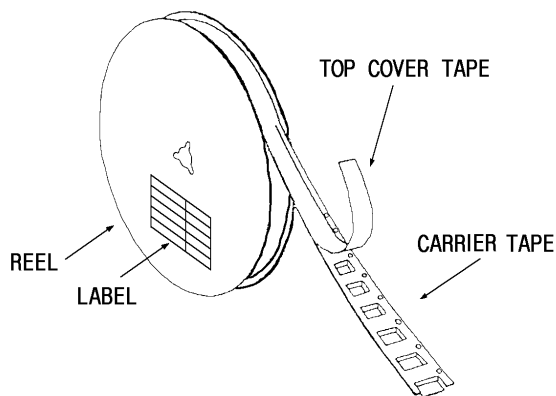
- The product shall be packed properly not to be damaged during transportation and storage.

4-2. REELING QUANTITY

10 inch reel : 8,000 pcs/reel

4-3. TAPING STRUCTURE

The tape shall be wound around the reel in direction shown below.



4-4. WEIGHT

7mg/EA