



DATASHEET -Preliminary-

Surface Acoustic Wave Filter

- **Application : LTE B3 & B1 Rx**
- **Model : SFWG42CBB02**
- **Center Frequency : 1842.5 / 2140.0 [MHz]**



WISOL CO., LTD.

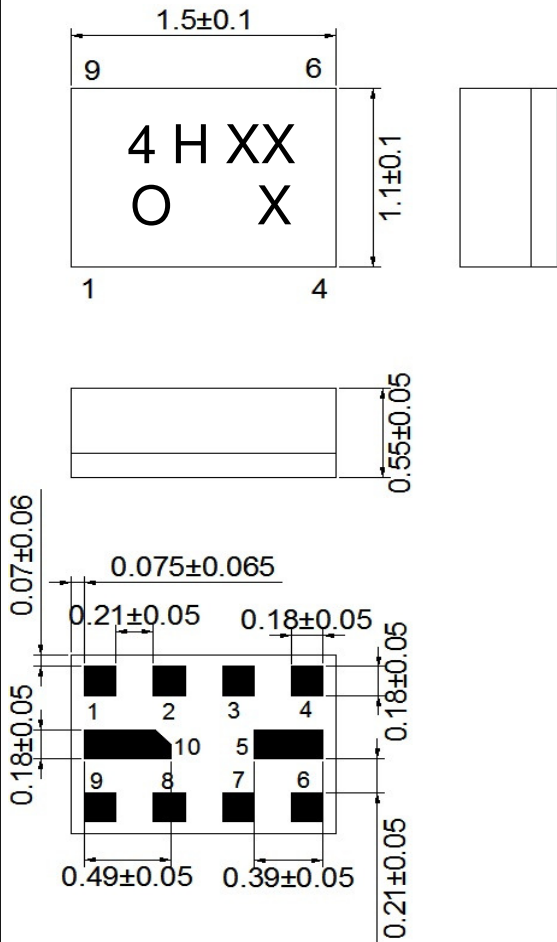
373-7, GAJANG-DONG, OSAN-SI,
GYEONGGI-DO, KOREA, 18103

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

E-mail: sales@wisol.co.kr

1. OUTLINE DRAWING & RECOMMENDED PCB

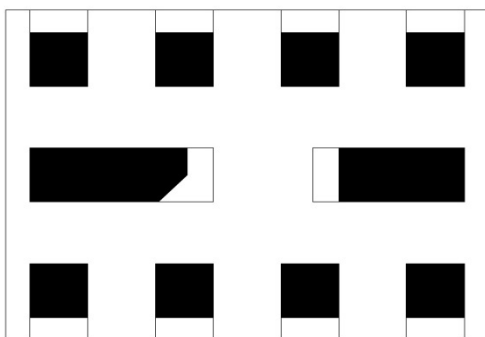
< Outline Drawing >



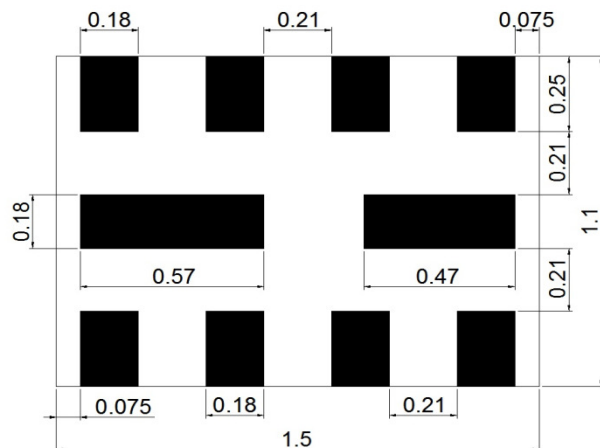
No.	Function
1	B1/B3 Unbalanced Input
6	B1 Unbalanced Output
9	B3 Unbalanced Output
2,3,4,5,7,8,10	GND

[Unit: mm]

<Recommended PCB>

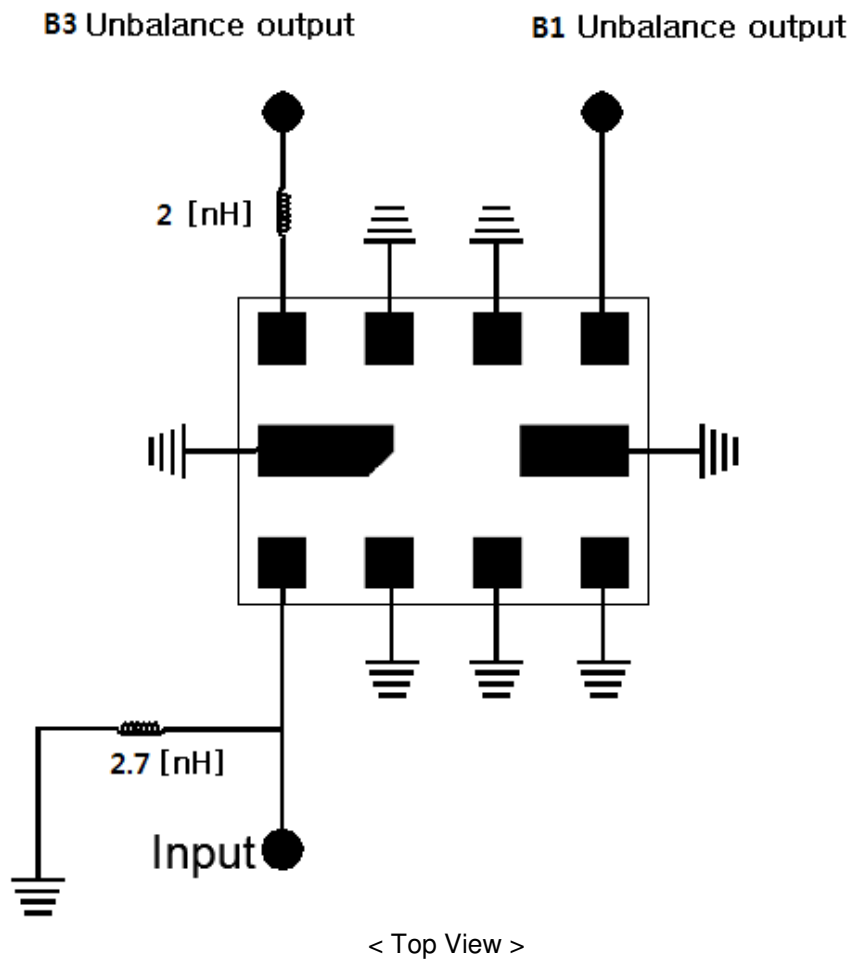


<SAW, X-ray Top view>



<PCB, X-ray Top view>

2. TEST FIXTURE



3. PERFORMANCE

3-1. MAXIMUM RATINGS

CHARACTERISTICS	RATINGS	UNITS
DC Permissive Voltage	5	V
Maximum Input Power	15	dBm
Operating Temperature Range	-30 ~ +85	°C
Storage Temperature Range	-40 ~ +85	°C

3-2. ELECTRICAL CHARACTERISTICS

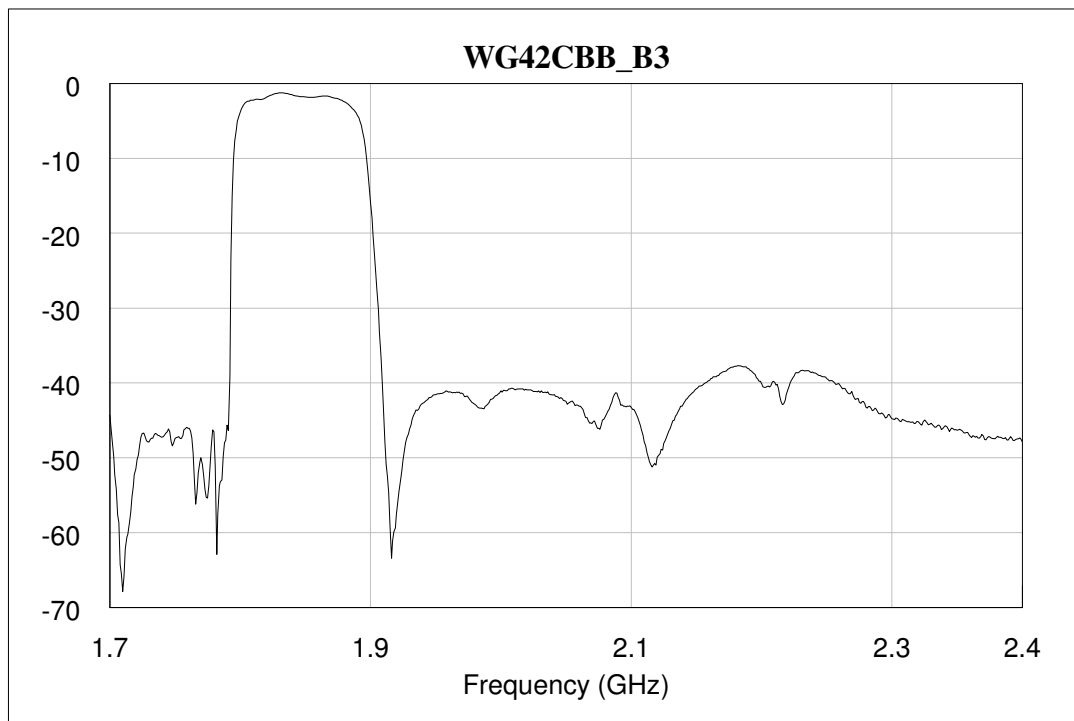
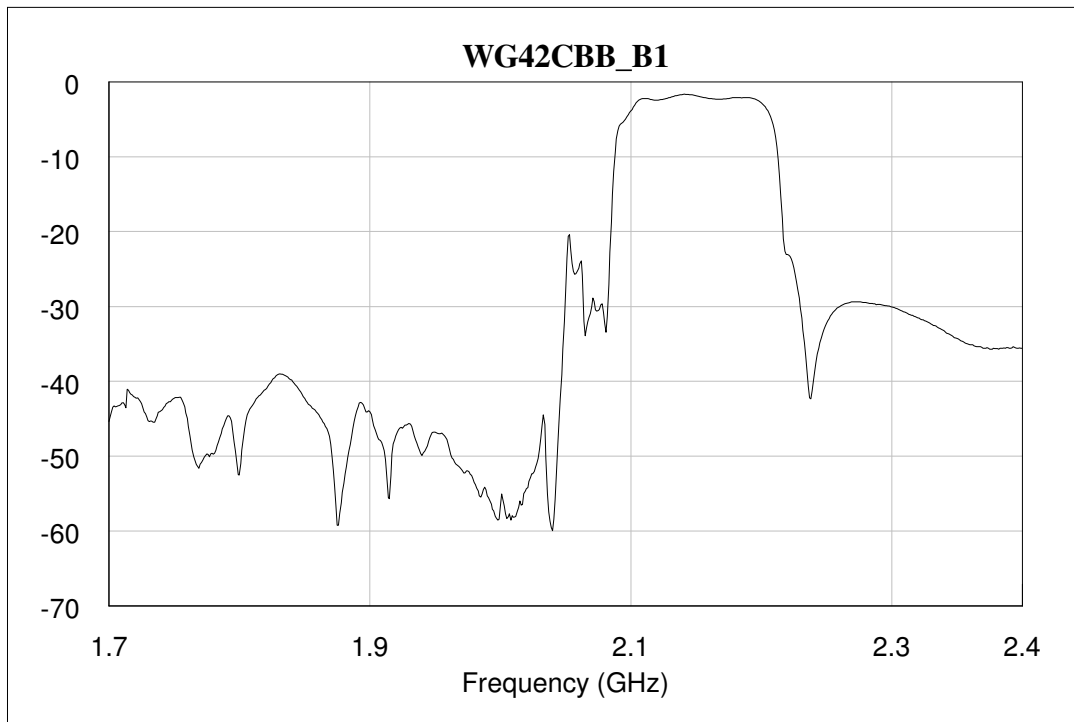
3-2-1. TABLE

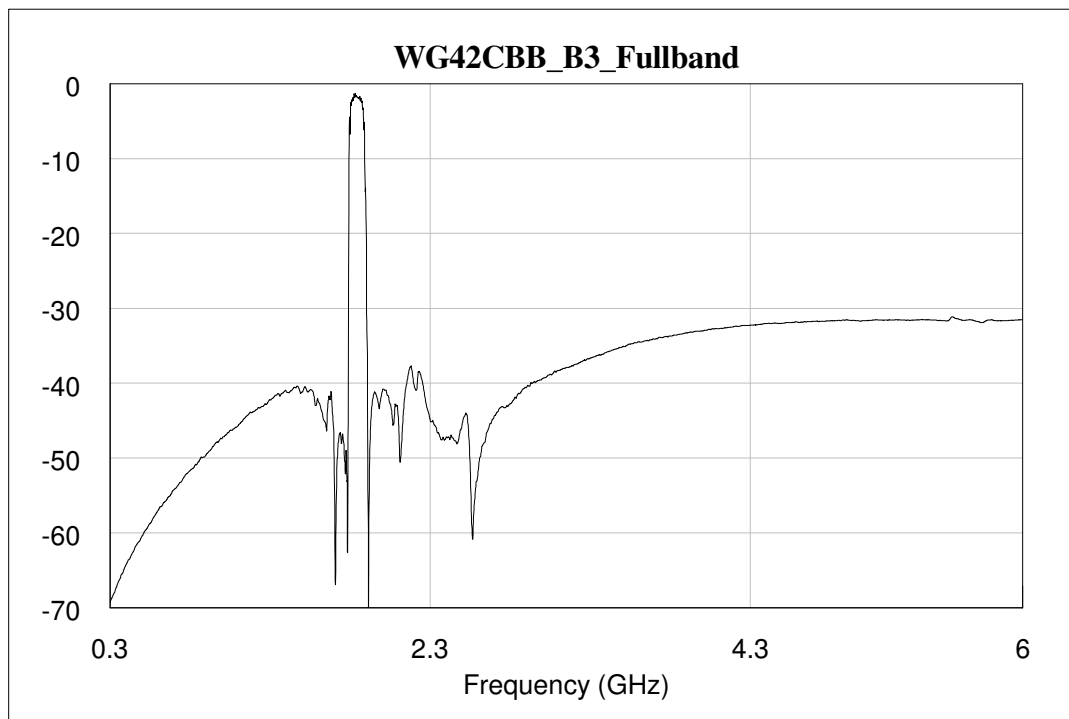
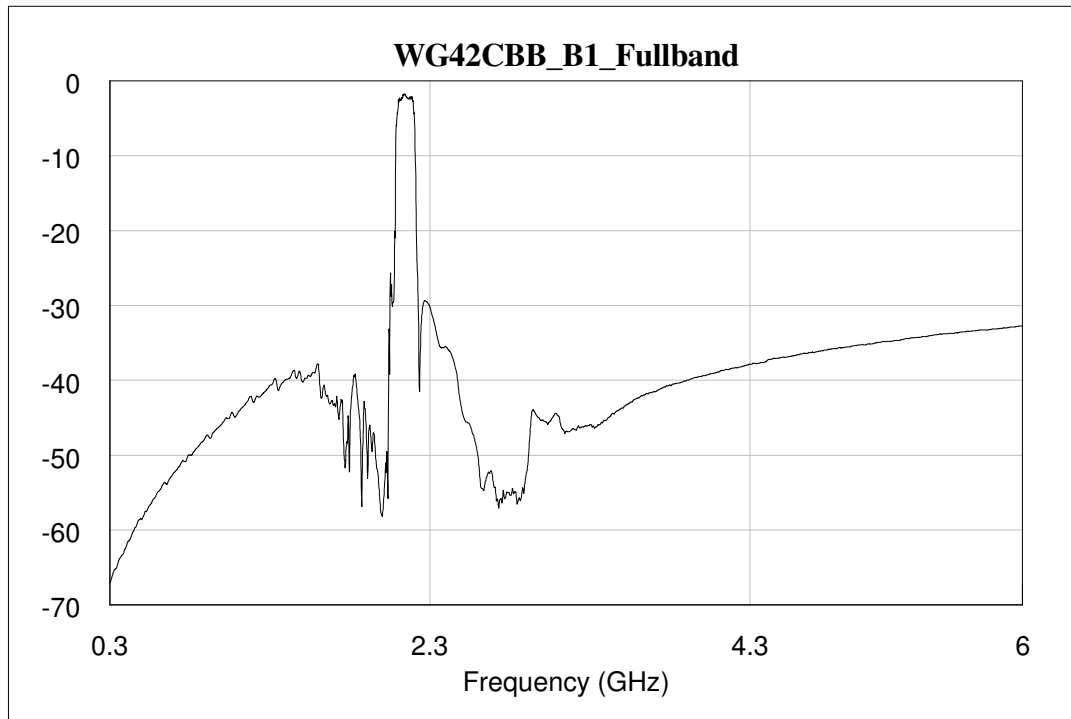
Ta = - 30 ~ + 85 °C

*1.PCB loss is de-embedded.

ITEM	UNIT	LTE Band1(AWS3) Rx				LTE Band3 Rx			
		Freq. Range [MHz]	Min.	Typ. (25°C)	Max.	Freq. Range [MHz]	Min.	Typ. (25°C)	Max.
Insertion Loss (*1)	dB	2110 ~ 2180	-	2.5	TBD	1805 ~ 1880	-	2.5	TBD
Inband Ripple	dB	2110 ~ 2180	-	0.9	TBD	1805 ~ 1880	-	1.3	TBD
Input VSWR	-	2110 ~ 2180	-	2.2	TBD	1805 ~ 1880	-	1.9	TBD
Output VSWR	-	2110 ~ 2180	-	2.2	TBD	1805 ~ 1880	-	1.9	TBD
Absolute Attenuation	dB	1 ~ 1710	TBD	37	-	1 ~ 1710	TBD	40	-
	dB	1710 ~ 1785	TBD	40	-	1710 ~ 1785	TBD	43	-
	dB	1920 ~ 1980	TBD	43	-	1920 ~ 1980	TBD	41	-
	dB	2400 ~ 2500	TBD	35	-	2400 ~ 2500	TBD	45	-
	dB	2500 ~ 6000	TBD	32	-	2500 ~ 6000	TBD	31	-
Termination Impedance	Input : Unbalanced 50 ohm // 2.7 nH Output: Band1 50ohm / Band3 Unbalanced 50 ohm + 2 nH								

3-2-2. GRAPH

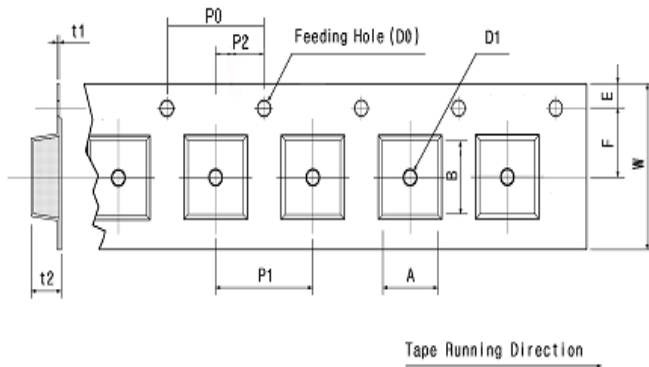




4. PACKING

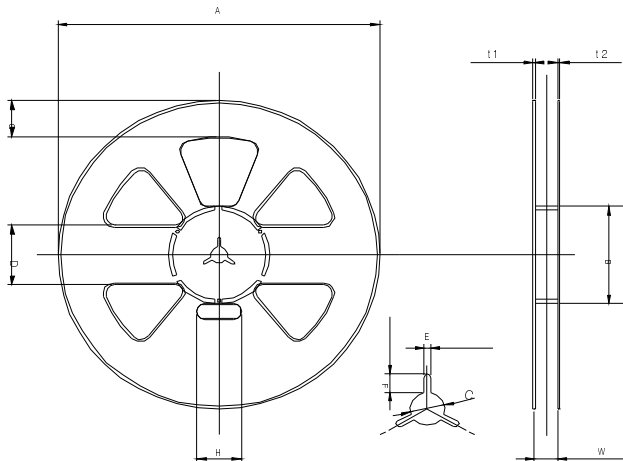
4-1. DIMENSIONS

- Carrier Tape [Unit: mm]



A	B	D0	D1
1.30 +0.05 -0.05	1.65 +0.05 -0.05	Ø1.50 +0.10 -0.00	Ø0.60 MIN
E	F	P0	P1
1.75 +0.10 -0.10	3.50 +0.05 -0.05	4.00 +0.10 -0.10	4.00 +0.10 -0.10
P2	t1	t2	W
2.00 +0.05 -0.05	0.25 +0.05 -0.05	0.70 +0.05 -0.05	8.00 +0.30 -0.10

- Reel [Unit: mm]



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

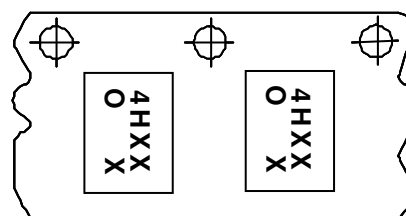
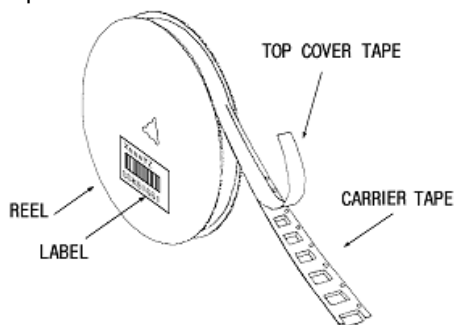
- The product shall be packed properly not to be damaged during transportation and storage.

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.



Tape Running direction