



DATASHEET -Preliminary-

Surface Acoustic Wave Filter

- **Application : LTE Band 2 Duplexer**
- **Model : SFXG80AYM02**
- **Center Frequency : 1880 / 1960 [MHz]**



WISOL CO., LTD.

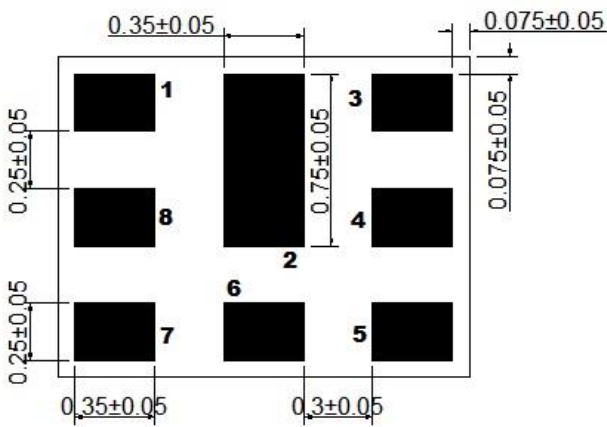
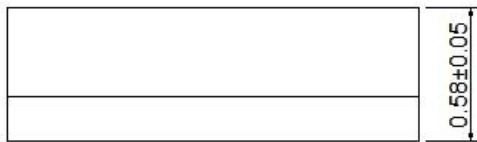
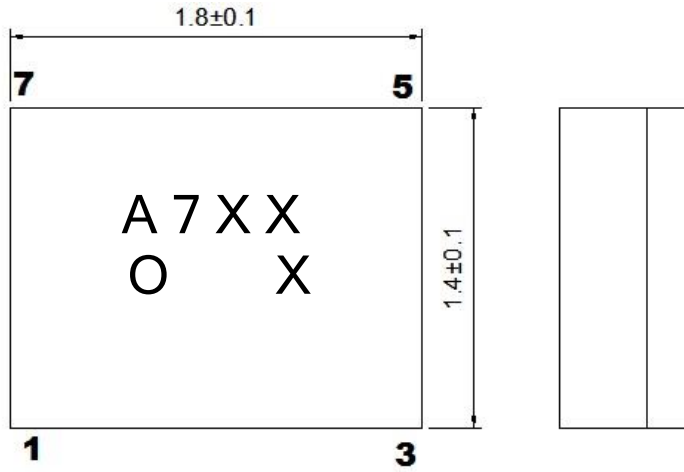
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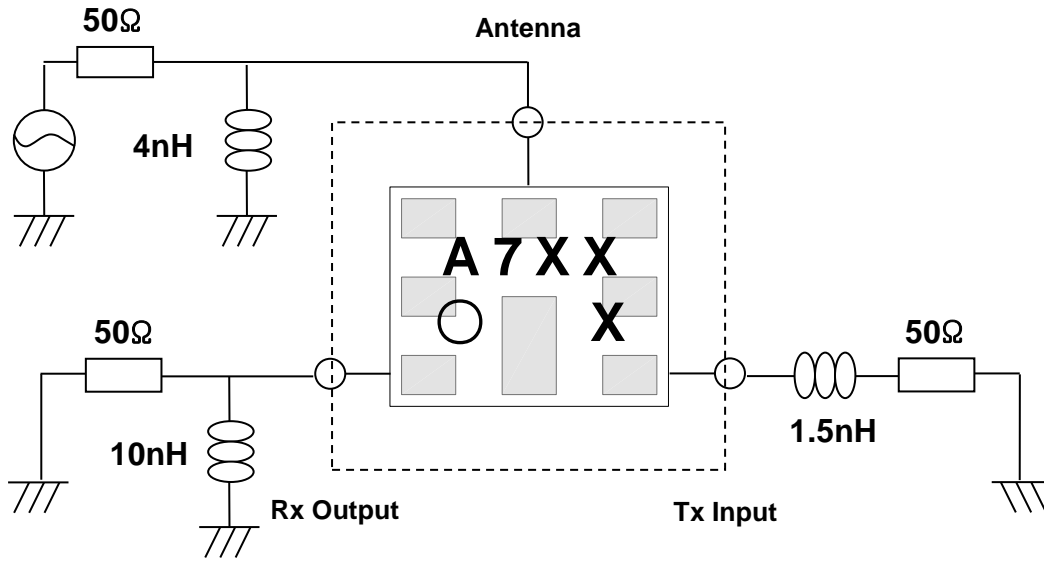
1. OUTLINE DRAWING & RECOMMENDED PCB

[Unit: mm]



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

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 | - 20 ~ + 85 | °C |
| Storage Temperature Range | - 40 ~ + 85 | °C |

3-2. ELECTRICAL CHARACTERISTICS

3-2-1. TABLE

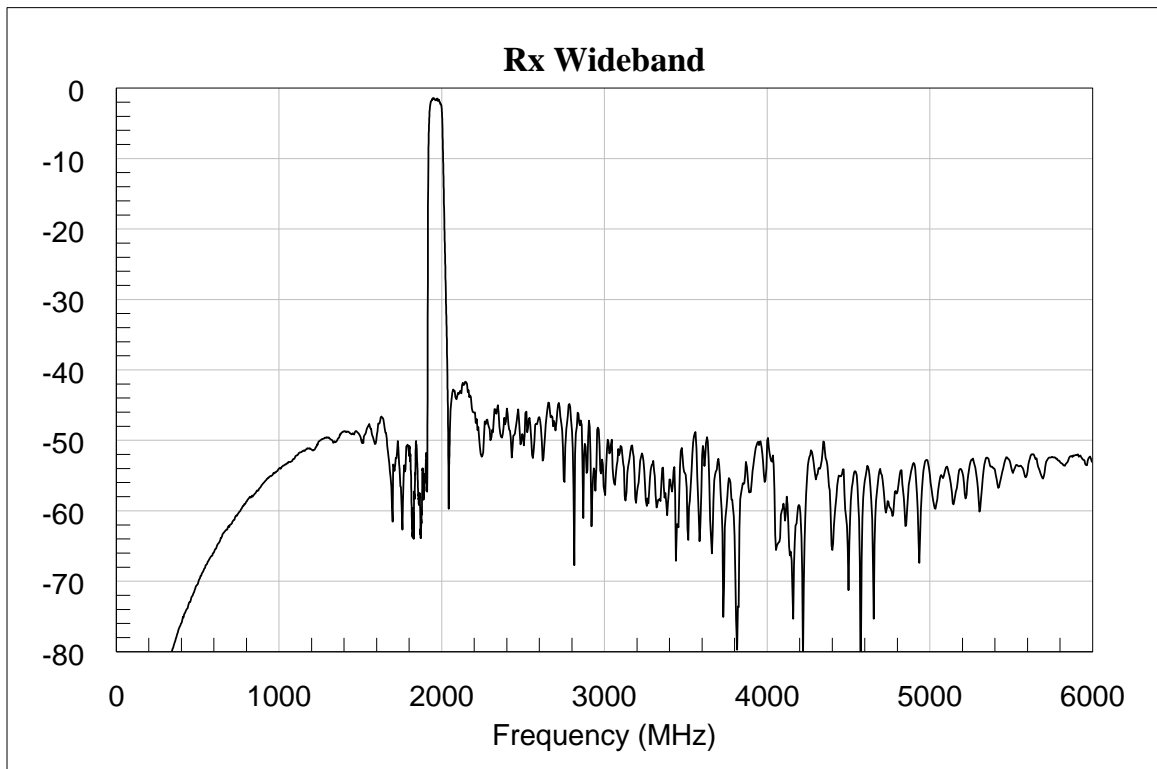
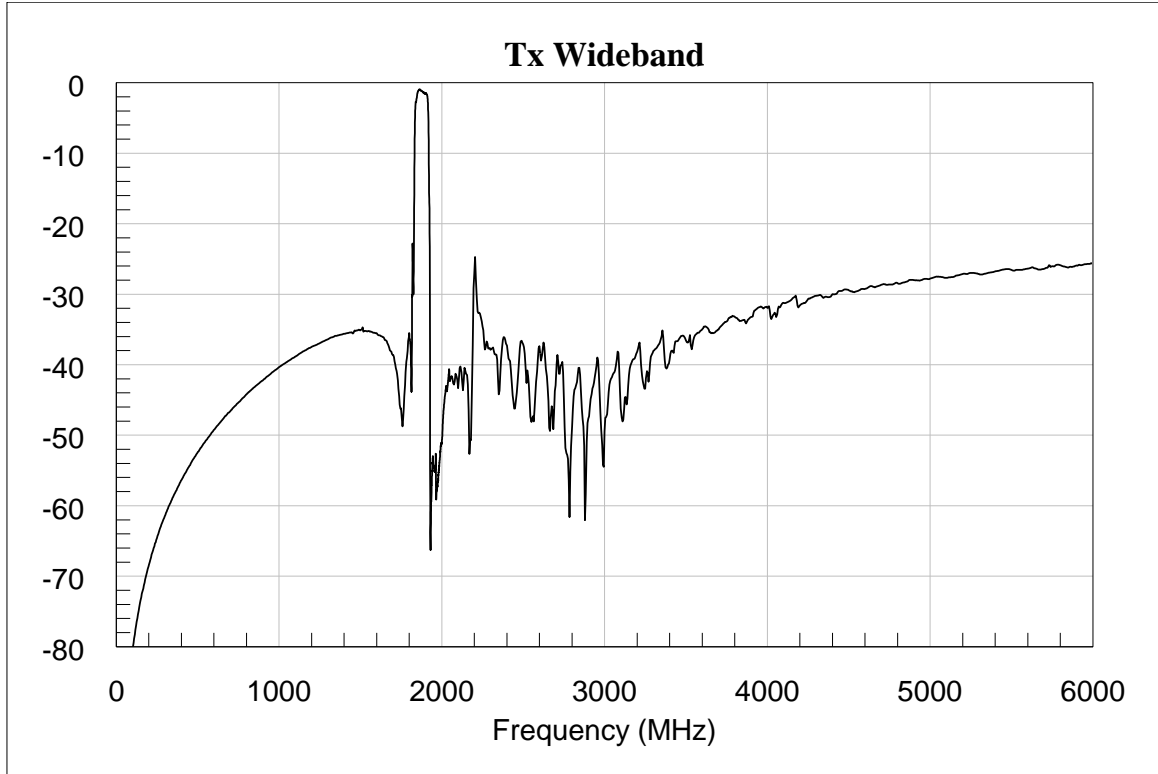
Ta = - 20 ~ + 85 °C

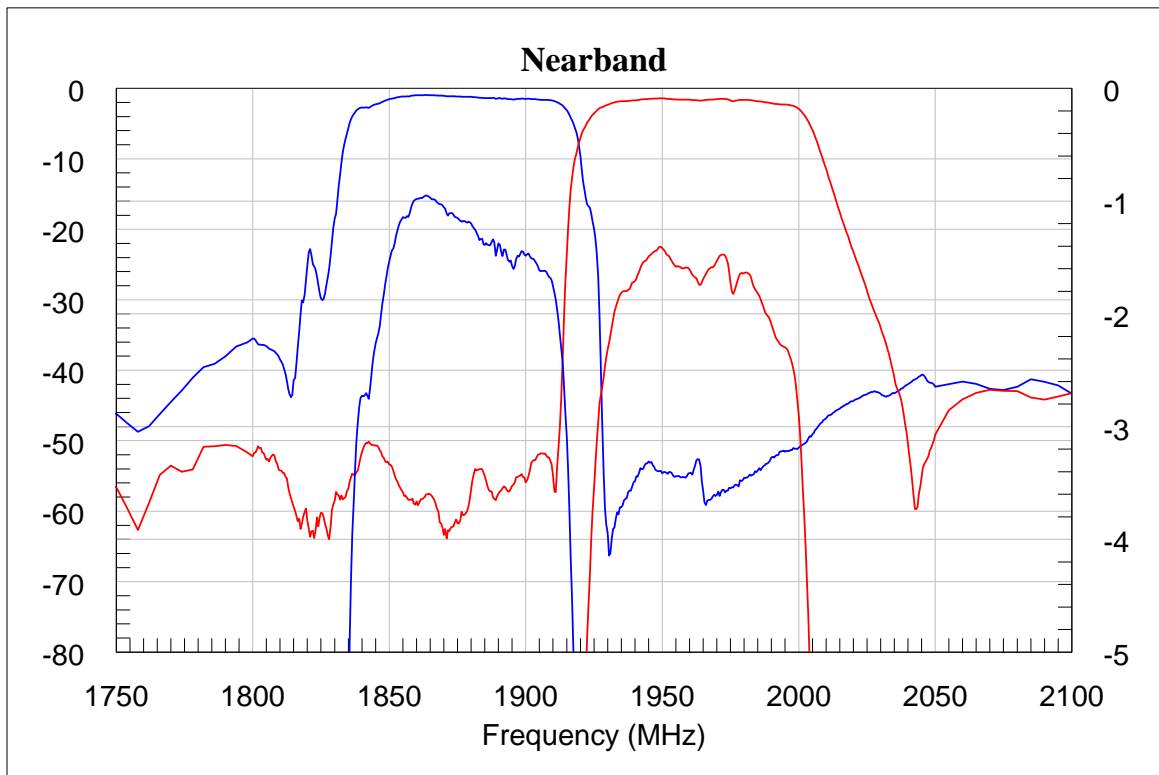
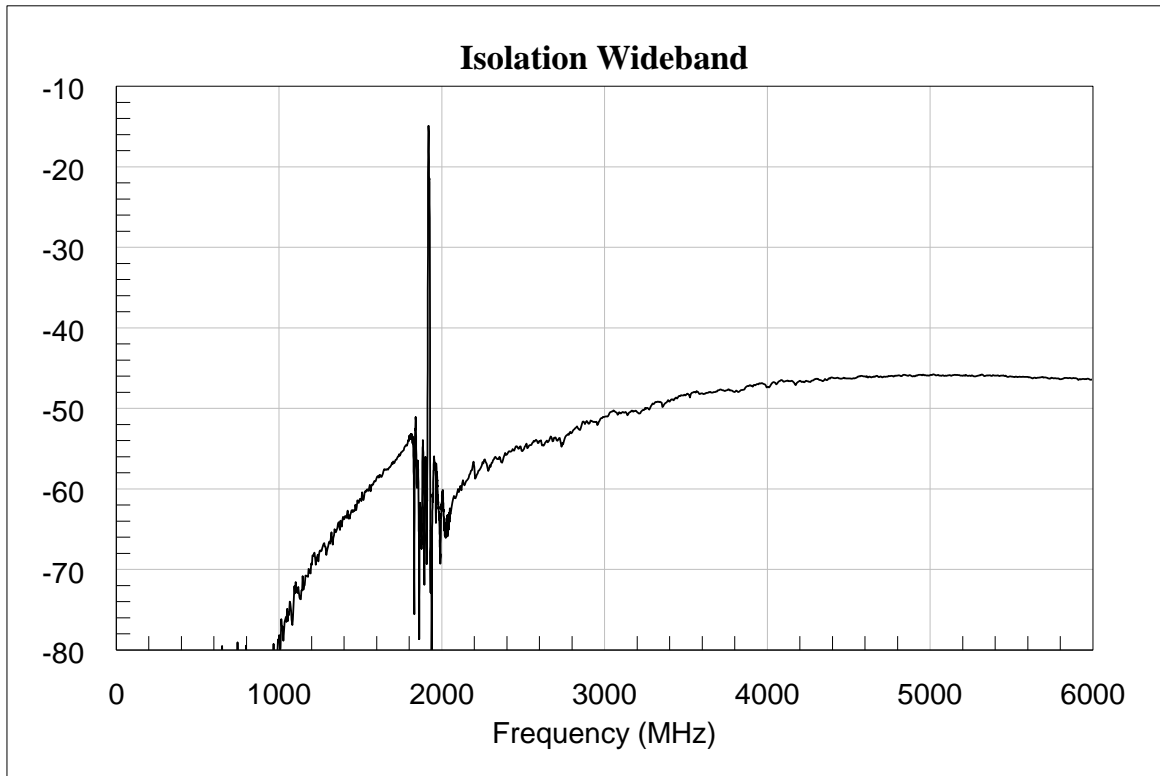
*1. PCB loss is de-embedded.

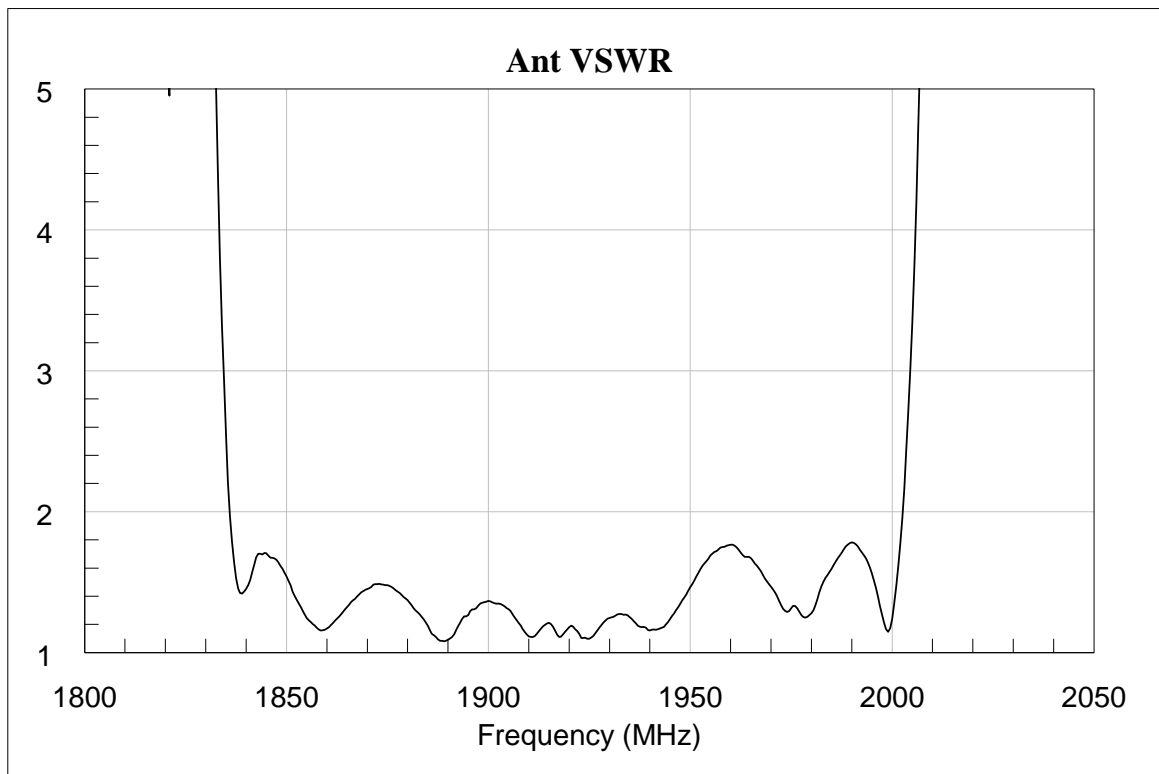
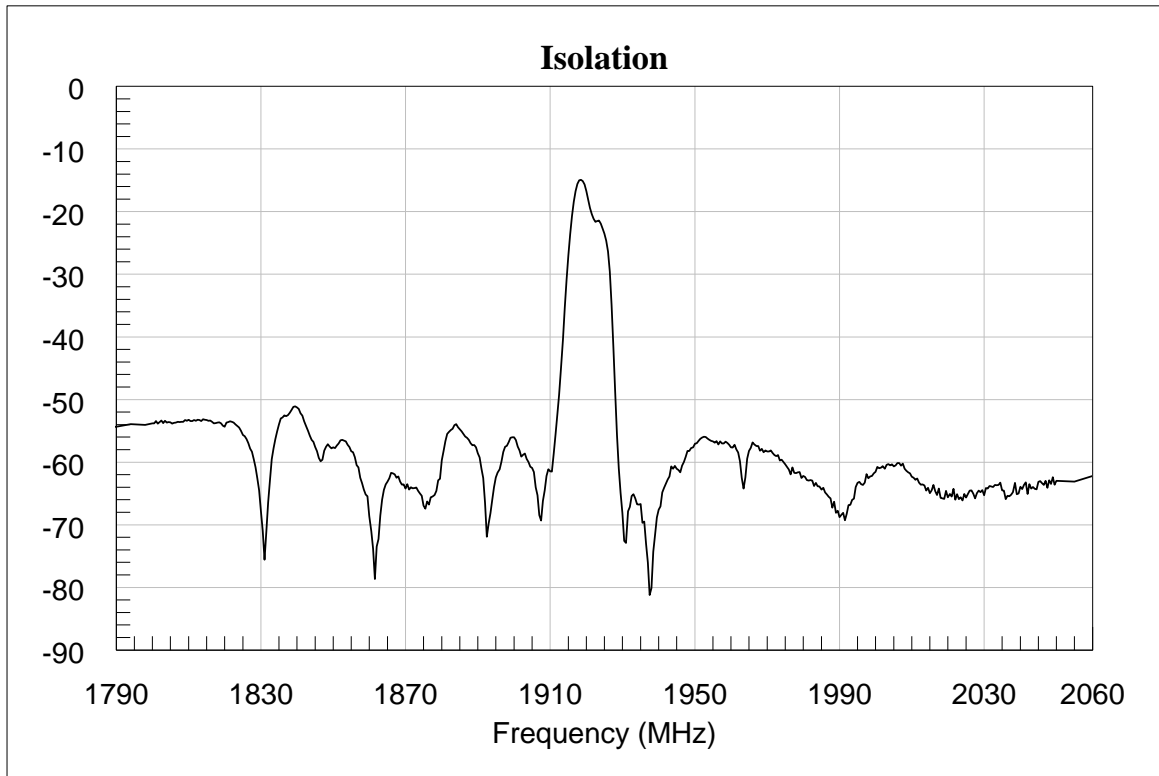
| Item | CONDITION [MHz] | UNIT | RATING | | |
|---|--------------------|-------------------------------|--------|------------|------|
| | | | Min. | Typ.(25°C) | Max. |
| TX → ANTENNA | | | | | |
| Insertion Loss(*1) | 1850.48 ~ 1909.52 | dB | - | 1.9 | 2.9 |
| Inband Ripple | 1950.48 ~ 1909.52 | dB | - | 1.5 | 2.0 |
| VSWR | 1850.48 ~ 1909.52 | - | - | 1.8 | 2.0 |
| Absolute Attenuation | 1565.4 ~ 1605.9 | dB | 33 | 36 | - |
| | 1605.9 ~ 1680 | dB | 33 | 36 | - |
| | 1930 ~ 1990 | dB | 48 | 50 | - |
| | 2000 ~ 2050 | dB | 38 | 40 | - |
| | 2400 ~ 2500 | dB | 30 | 37 | - |
| | 3700 ~ 3820 | dB | 25 | 31 | - |
| | 5500 ~ 5730 | dB | 20 | 25 | - |
| Termination Impedance : INPUT / ANTENNA | | 50Ω + 1.5[nH] 50Ω // 4[nH] | | | |
| ANTENNA → RX | | | | | |
| Insertion Loss(*1) | 1930.48 ~ 1989.52 | dB | - | 2.4 | 3.0 |
| Inband Ripple | 1930.48 ~ 1989.52 | dB | - | 1.5 | 2.0 |
| VSWR | 1930.48 ~ 1989.52 | - | - | 2.1 | 2.3 |
| Absolute Attenuation | 1850 ~ 1910 | dB | 49 | 50 | - |
| Termination Impedance : ANT / OUTPUT | | 50Ω // 4[nH] 50Ω // 10[nH] | | | |
| TX → RX | | | | | |

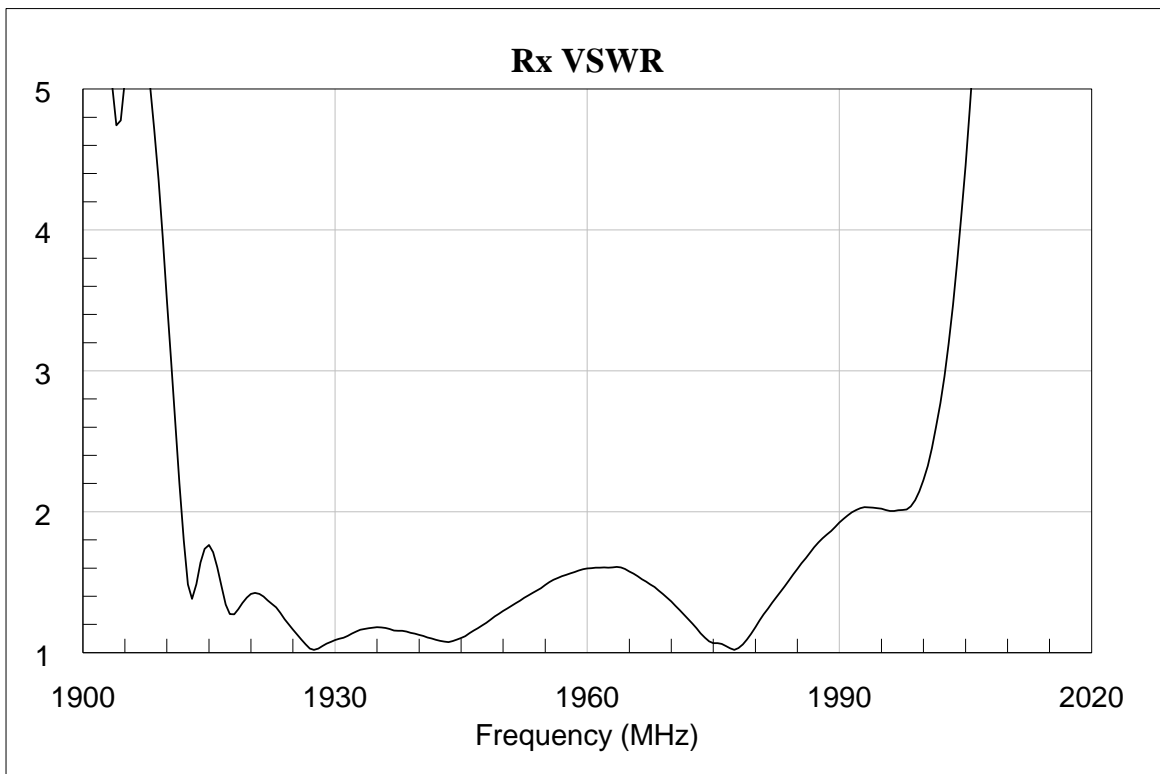
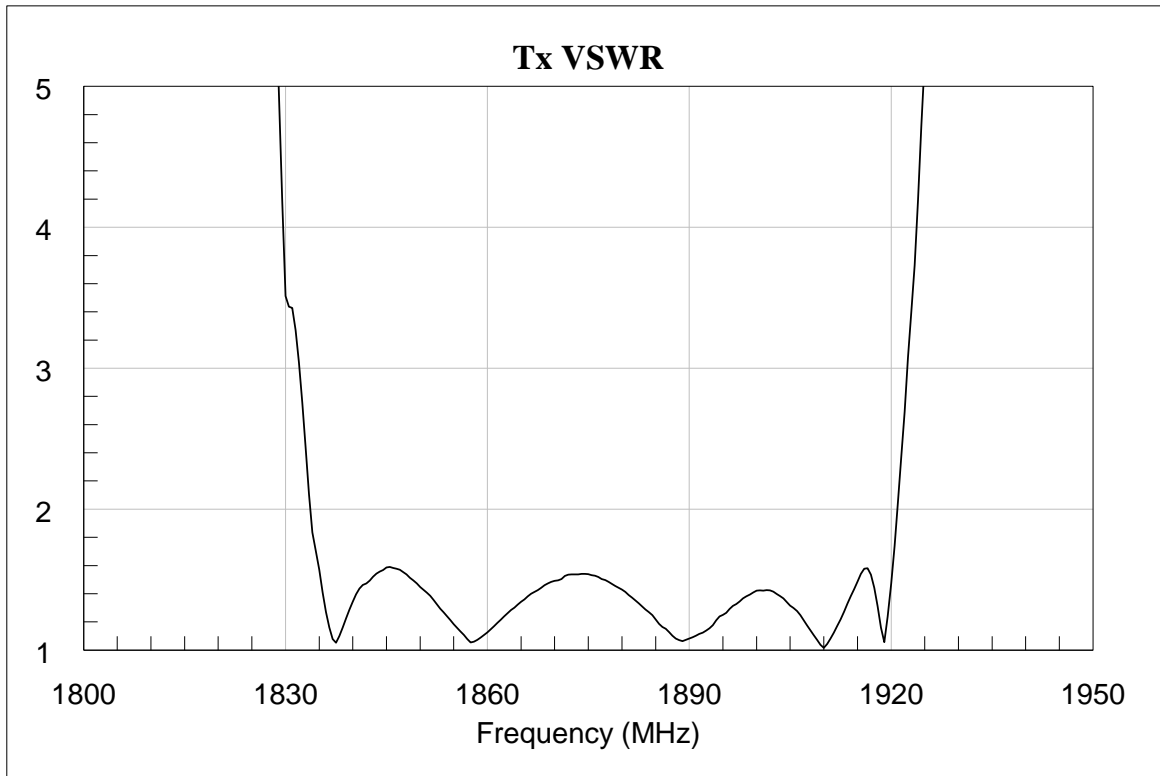
| | | | | | |
|--------------------------------|-------------------|----|----|----|---|
| Isolation between Rx and Tx | 1850.48 ~ 1909.52 | dB | 51 | 54 | - |
| | 1930.48 ~ 1989.52 | dB | 48 | 55 | - |

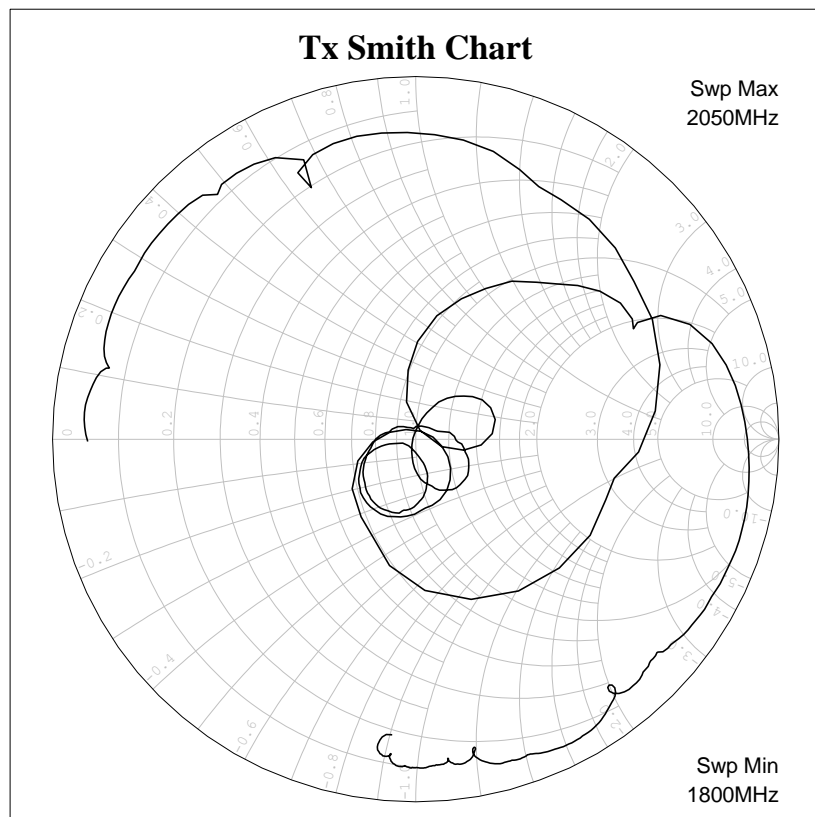
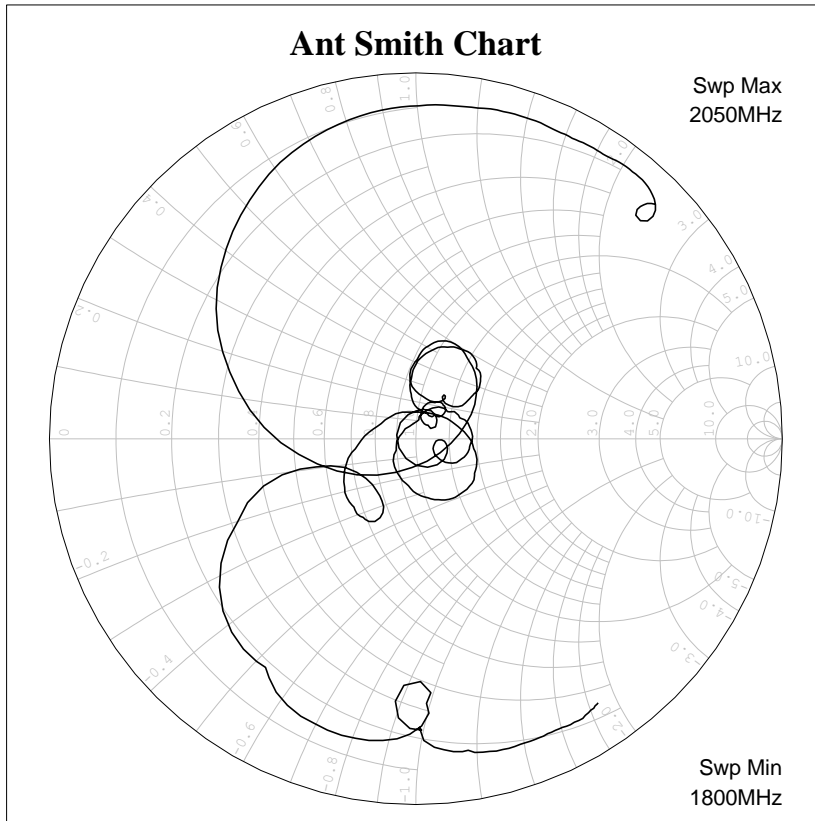
3-2-2. GRAPH

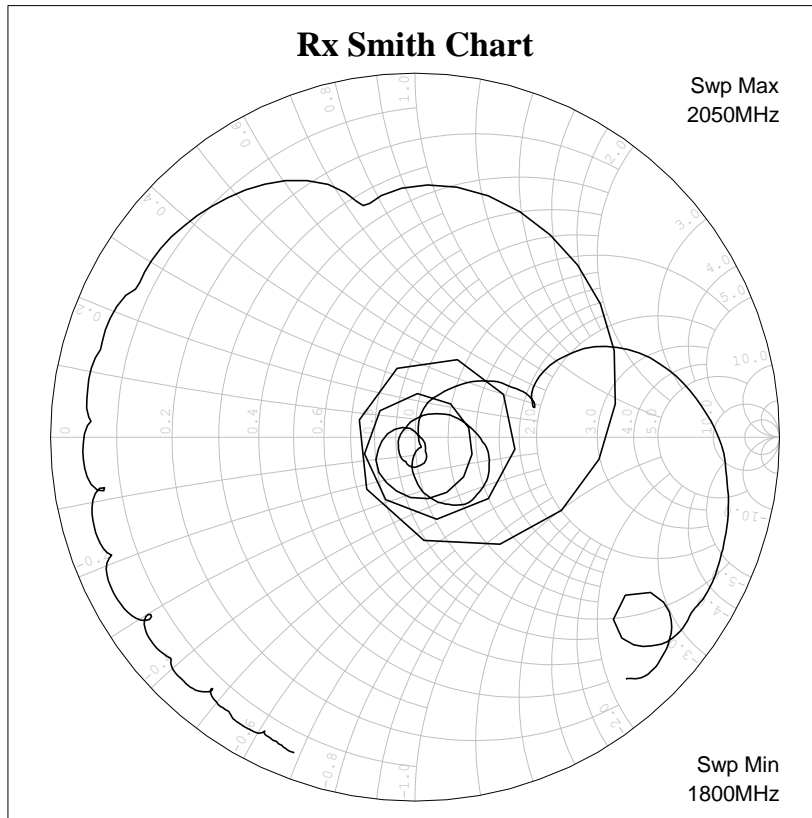








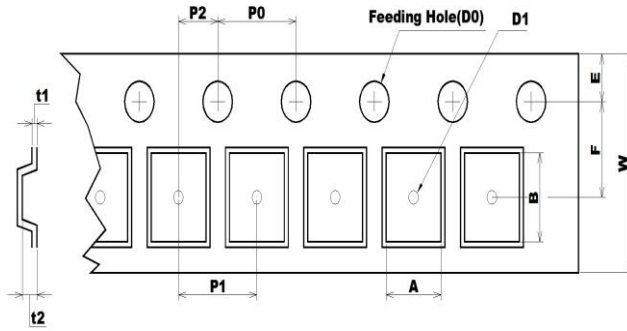




4. PACKING

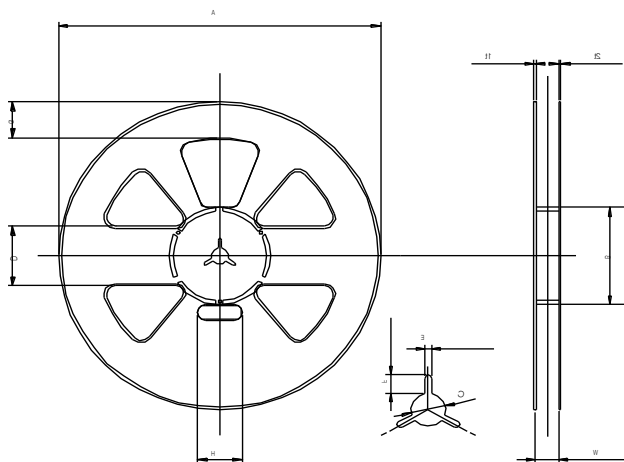
4-1. DIMENSIONS

- Carrier Tape [Unit: mm]



| | | | |
|------------------------|------------------------|-------------------------|------------------------|
| A | B | D0 | D1 |
| 1.60 +0.05 -0.05 | 2.00 +0.05 -0.05 | Ø1.55 +0.05 -0.05 | Ø1.00 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 | 0.80 +0.05 -0.05 | 8 +0.10 -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.

