DATASHEET
-Preliminary-

Surface Acoustic Wave Filter

- **Application : BAND20 DPX**
- **Model : SFX806BYH02**
- **Center Frequency : 806.0 [MHz]**

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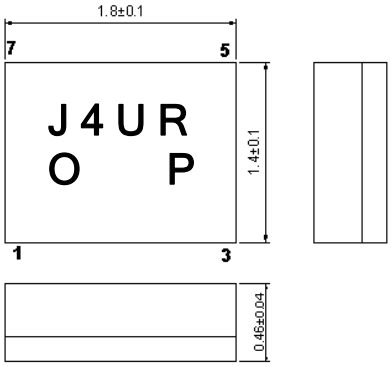
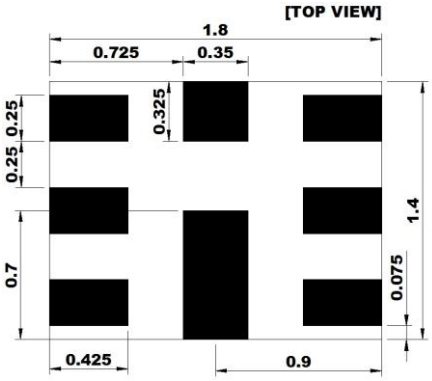
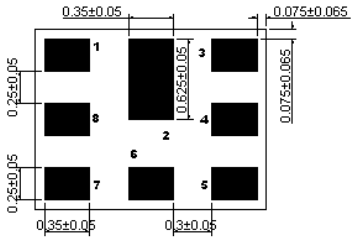
1. OUTLINE DRAWING & RECOMMENDED PCB

[Unit: mm]

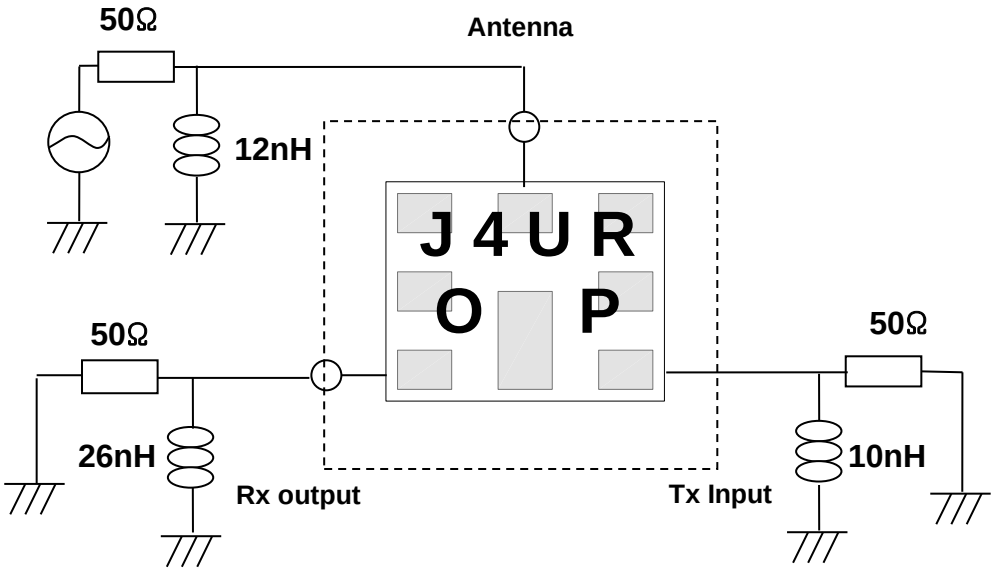






No.	Function
1	Rx Output
3	Tx Input
6	Antenna
2, 4, 5, 7, 8	GND

2. TEST FIXTURE



< Top View >

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	℃
Storage Temperature Range	－40 ~ ＋85	℃

3-2. ELECTRICAL CHARACTERISTICS

3-2-1. TABLE

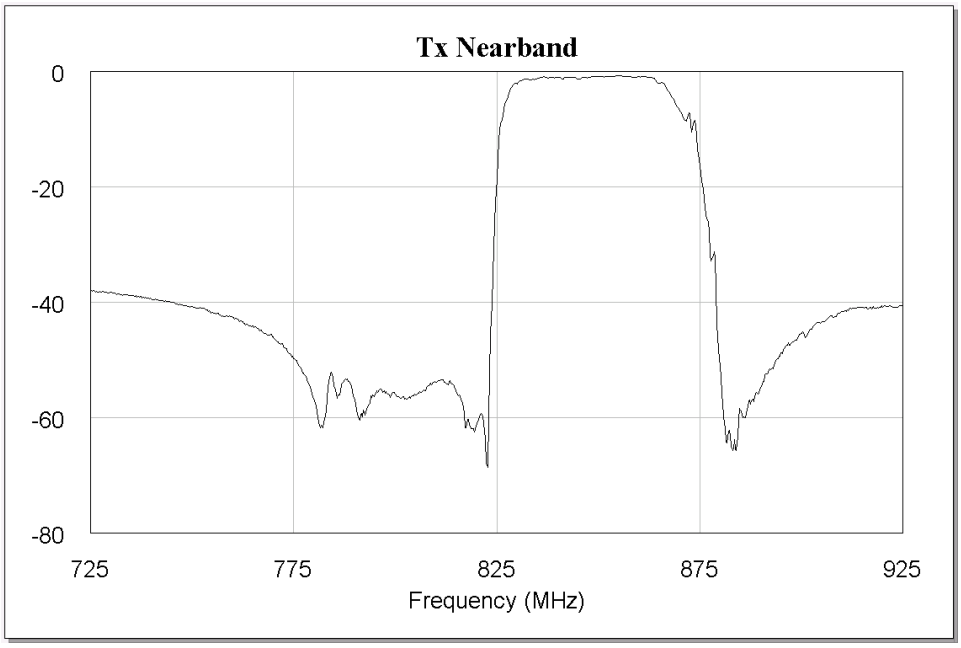
Ta = -30 ~ ＋85℃

Item	CONDITION [MHz]	UNIT	RATING		
			Min.	Typ.(25℃)	Max.
TX → ANTENNA					
Insertion Loss	832~ 862	dB	-	1.6	TBD
Inband Ripple	832~ 862	dB	-	0.9	TBD
VSWR	832~ 862	-	-	1.8	TBD
Absolute Attenuation	10~771	dB	TBD	36	-
	771~791	dB	TBD	49	-
	791~820	dB	TBD	54	-
	820~821	dB	TBD	52	-
	821~827	dB	TBD	5.6	-
	873~903	dB	TBD	8.4	-
	925~960	dB	TBD	40	-
	1565~1606	dB	TBD	46	-
	1664~2170	dB	TBD	45	-
	2400~2620	dB	TBD	44	-
	2620~2690	dB	TBD	44	-
	3328~3448	dB	TBD	40	-
	4000~6000	dB	TBD	20	-
Termination Impedance : INPUT / ANTENNA			50Ω // 10[nH] 50Ω // 12[nH]		
ANTENNA → RX					
Insertion Loss	791 ~ 821	dB	-	1.9	TBD
Inband Ripple	791 ~ 821	dB	-	0.8	TBD
VSWR	791 ~ 821	-	-	1.8	TBD

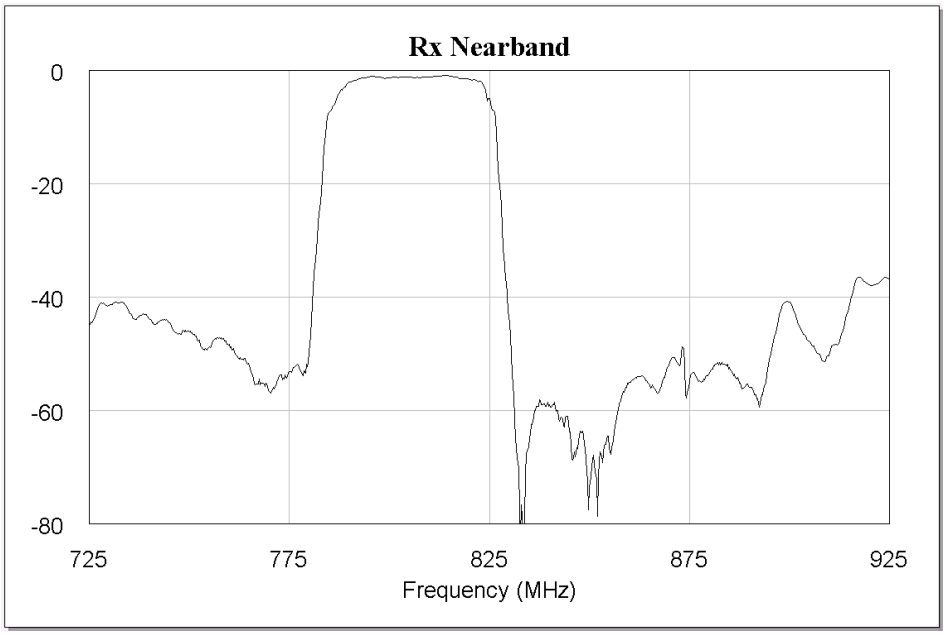
Absolute Attenuation	10~770	dB	TBD	40	-
	770~782	dB	TBD	27	-
	832~862	dB	TBD	55	-
	873~903	dB	TBD	41	-
	1623~1683	dB	TBD	43	-
	2373~2570	dB	TBD	39	-
	4900~6000	dB	TBD	26	-
Termination Impedance : ANT / OUTPUT			50Ω // 12nH] 50Ω // 26[nH]		
TX → RX					
Isolation between Tx and Rx	791~820	dB	TBD	57	-
	820~821	dB	TBD	57	-
	832~862	dB	TBD	57	-
	1574 ~ 1577	dB	TBD	54	-
	1664 ~ 1724	dB	TBD	53	-
	2496 ~ 2586	dB	TBD	49	-

3-2-2. GRAPH

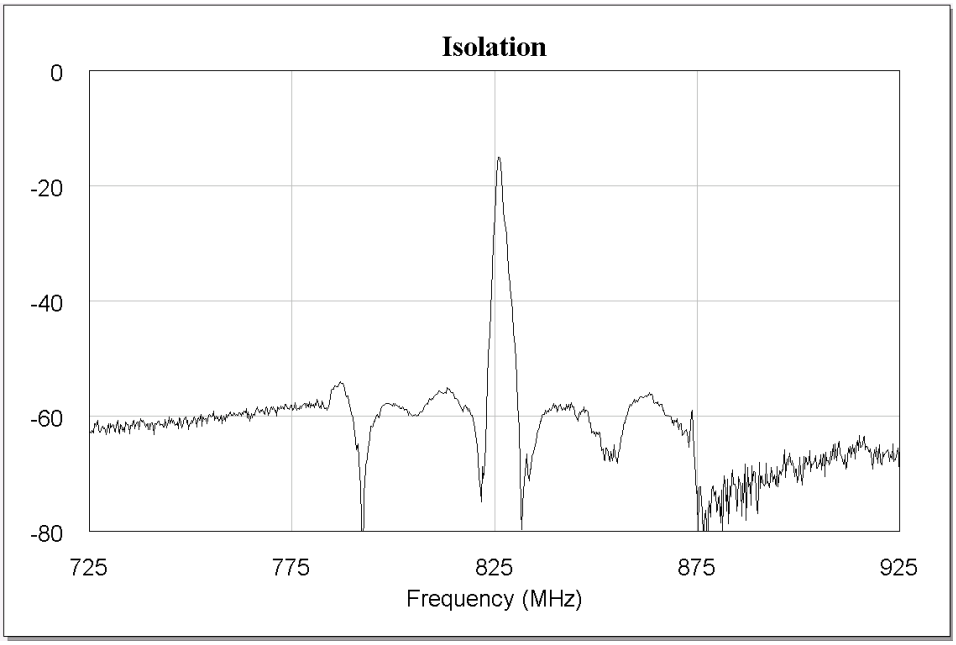
3-2-2-1. Tx→Ant, Transmission Characteristics



3-2-2-2 Ant→Rx Transmission Characteristics

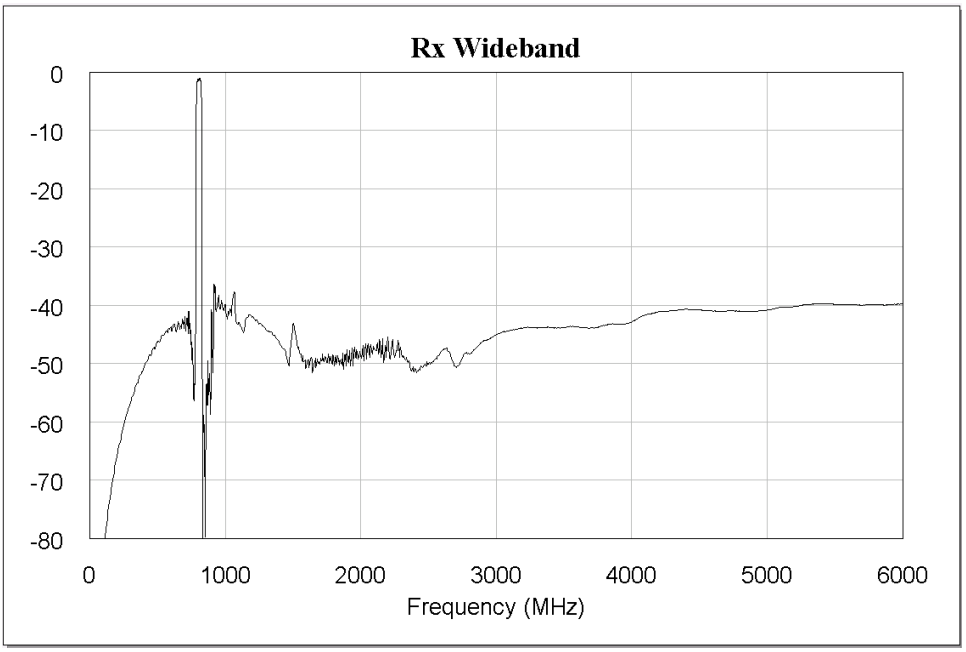


3-2-2-3. Tx→Rx Isolation Characteristics

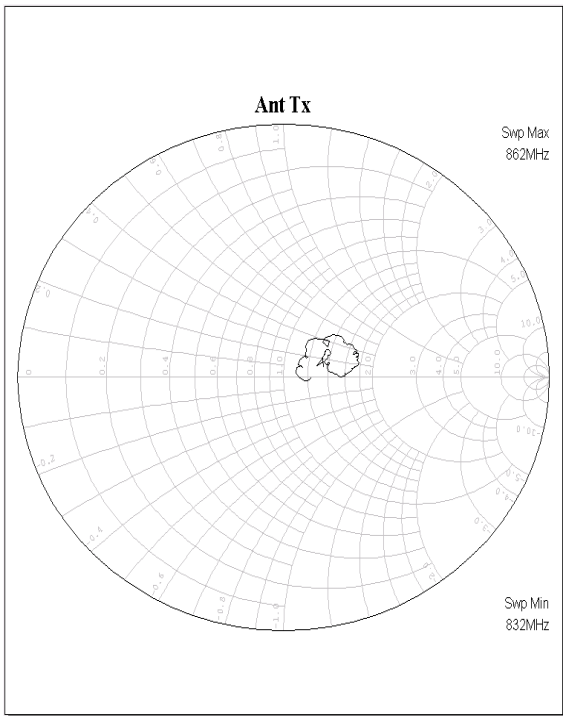


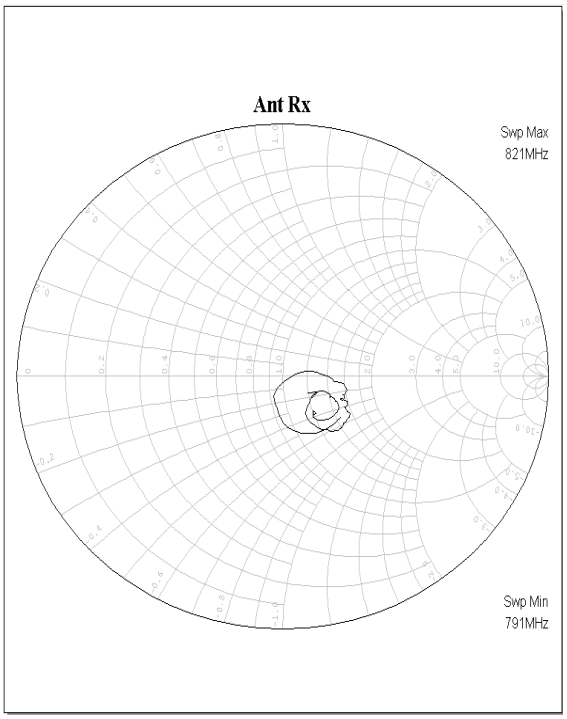
3-2-2-4. Wideband Tx→Ant Transmission Characteristics

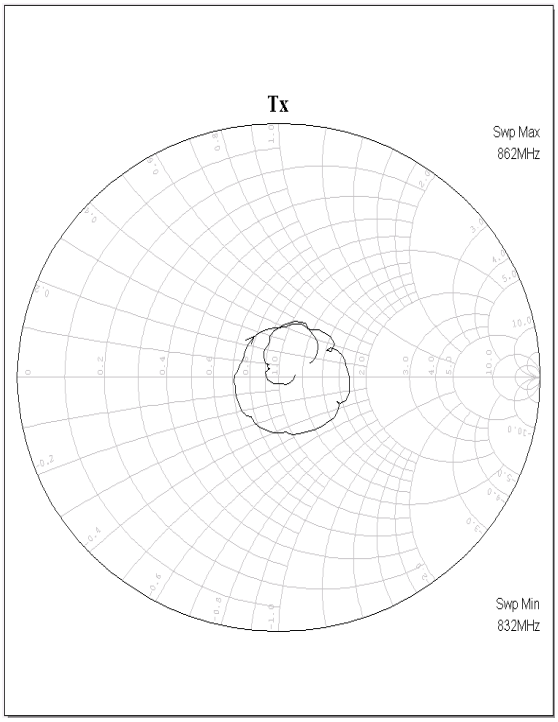
3-2-2-5. Wideband Ant→Rx Transmission Characteristics

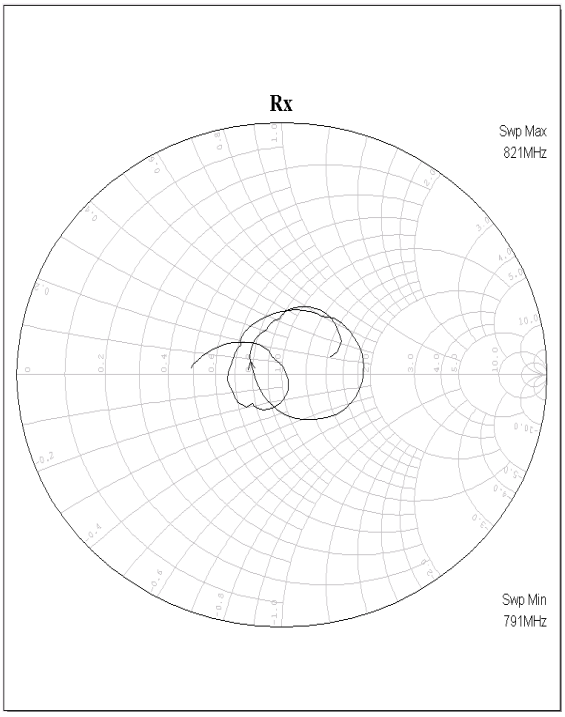


3-2-2-6. Smith chart





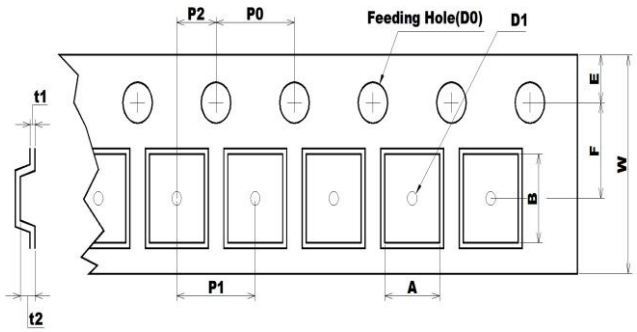

Tx
Swp Max
862MHz
Swp Min
832MHz


Rx
Swp Max
821MHz
Swp Min
791MHz

4. PACKING

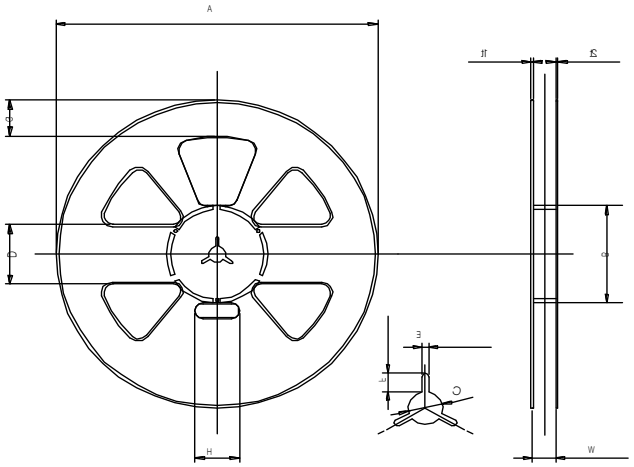
4-1. DIMENSIONS

- Carrier Tape [Unit: mm]



A	B	D0	D1
1.60 ±0.05	2.0 ±0.05	Ø1.55 ±0.05	Ø1.00 MIN
E	**F**	**P0**	**P1**
1.75 +0.10 -0.10	3.5 ±0.05	4 ±0.10	4 ±0.10
P2	**t1**	**t2**	**W**
2 ±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	

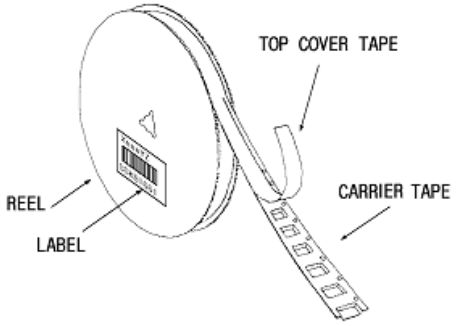
- The product shall be packed properly not to be damaged during transportation and storage.

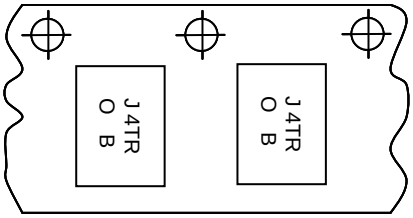
4-2. REELING QUANTITY

10 inch reel: 8,000 pcs/reel

4-3. TAPING STRUCTURE

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





Tape Running direction