



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Product Specifications Approval Sheet

Product Name: Duplexer 836.5/881.5MHz 25MHz BW SMD 3.8×3.8 mm

TST Parts No.: TF0071A

Customer Part No.: \_\_\_\_\_

Customer signature required


Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ Andy Yu 

Approved by: \_\_\_\_\_ Bob Chau 

Date: \_\_\_\_\_ 2015/02/02

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: [tstsales@mail.taisaw.com](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## SAW Duplexer 836.5/881.5MHz 25MHz BW SMD 3.8x3.8 mm

MODEL NO.: TF0071A

REV. No.: 2.0

### A. MAXIMUM RATING:

1. Maximum Input Power: 1.2 W
2. DC voltage: 0 V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant

Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

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

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

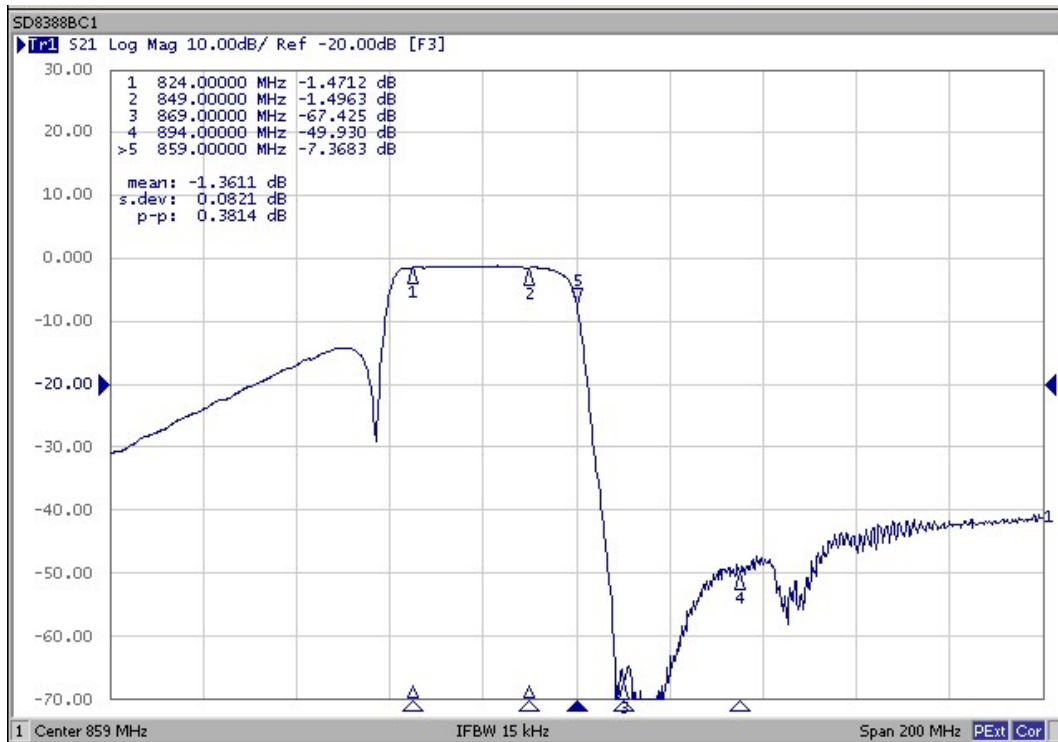
Terminating impedance(Ant Port): 50 Ω(Single-ended)

Tx_836.5MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	824 ~ 849	dB	-	1.5	2.2
Ripple	824 ~ 849	dB <sub>p-p</sub>	-	0.4	1.0
VSWR	824 ~ 849	-	-	1.9	2.4
Absolute Attenuation	859	dB	4	9	-
	869 ~ 894	dB	45	50	-
Rx_881.5MHz		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Insertion Loss	869 ~ 894	dB	-	2.0	3.0
Ripple	869 ~ 894	dB <sub>p-p</sub>	-	0.8	1.5
VSWR	869 ~ 894	-	-	1.7	2.2
Absolute Attenuation	824 ~ 849	dB	50	58	-
	859	dB	4	13	-
Rx → Tx		SPECIFICATIONS			
ITEM	CONDITION [MHz]	Unit	Min.	Typ.	Max.
Isolation	824 ~ 849	dB	50	55	-
	869 ~ 894	dB	48	53	-

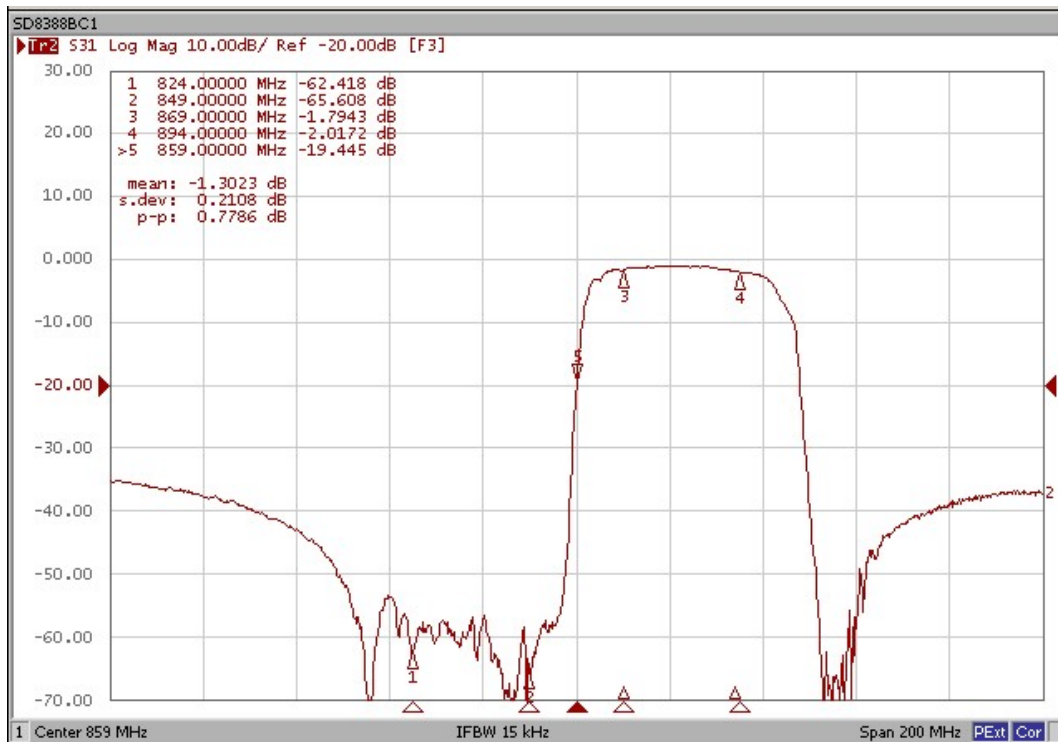
\*Note : Including losses due to Test PCB(0.3dB)

## C. Frequency Characteristics :

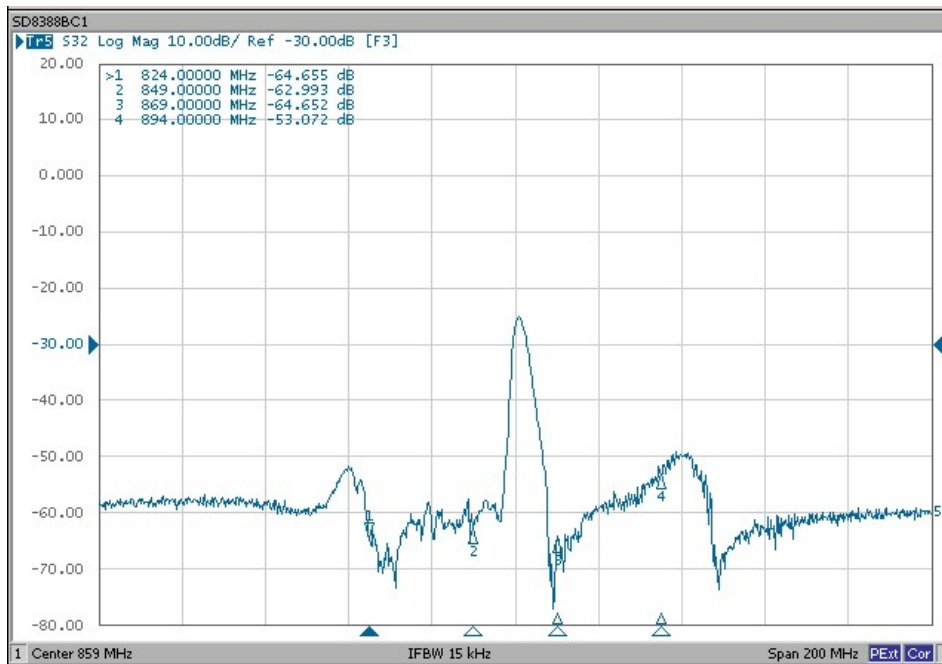
### Tx Characteristic



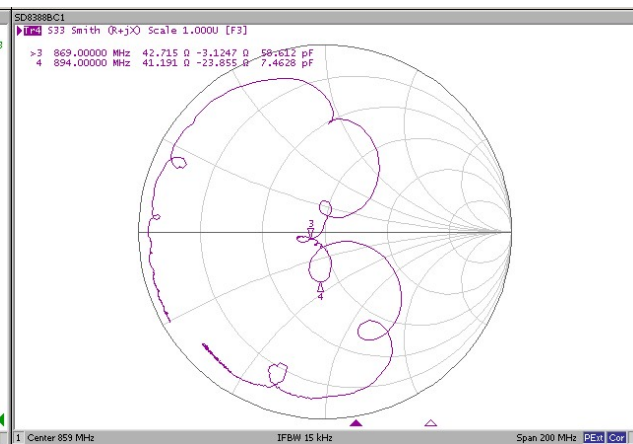
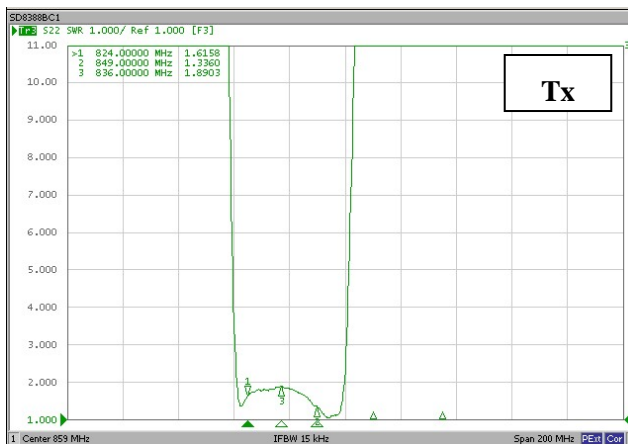
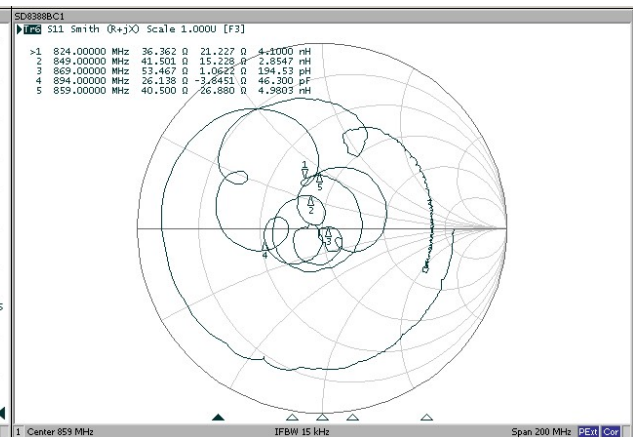
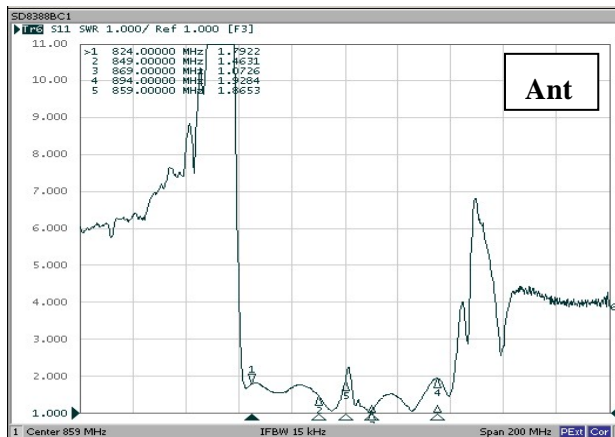
### Rx Characteristic

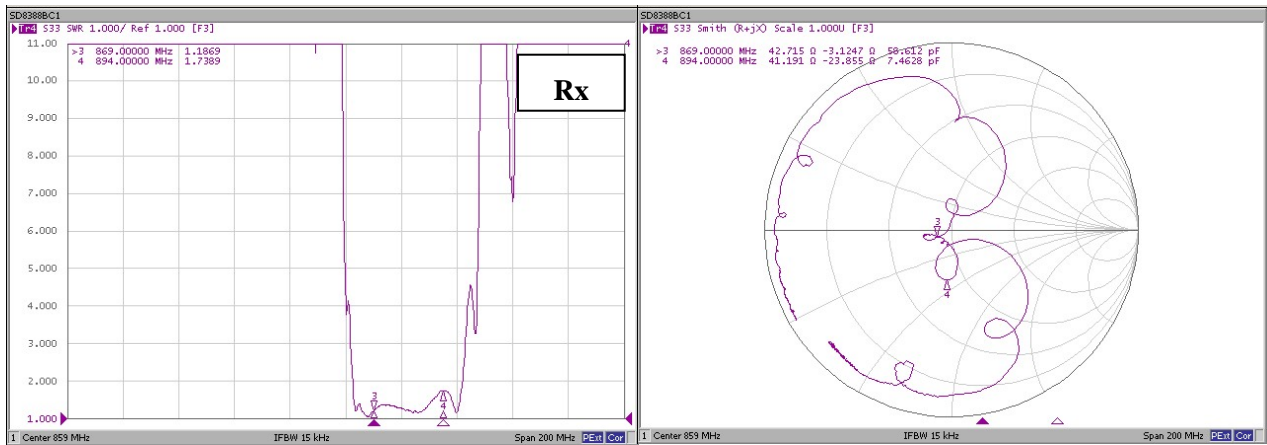


## Isolation Characteristic

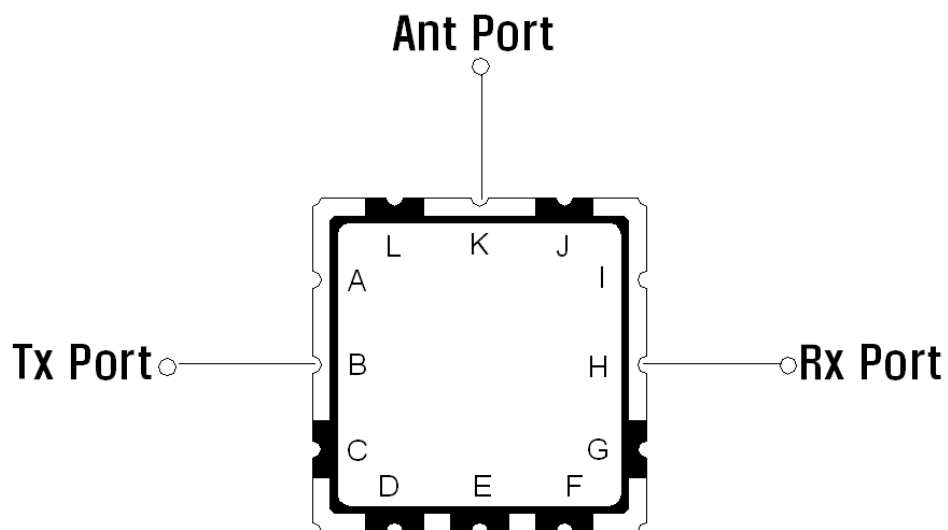


## VSWR & Smith Chart



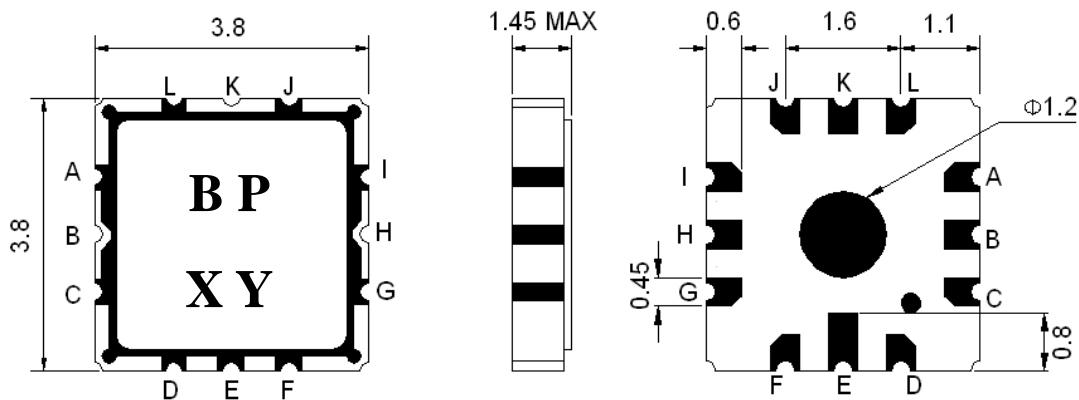


#### D. MEASUREMENT CIRCUIT:



# E.OUTLINE DRAWING:

Unit: mm

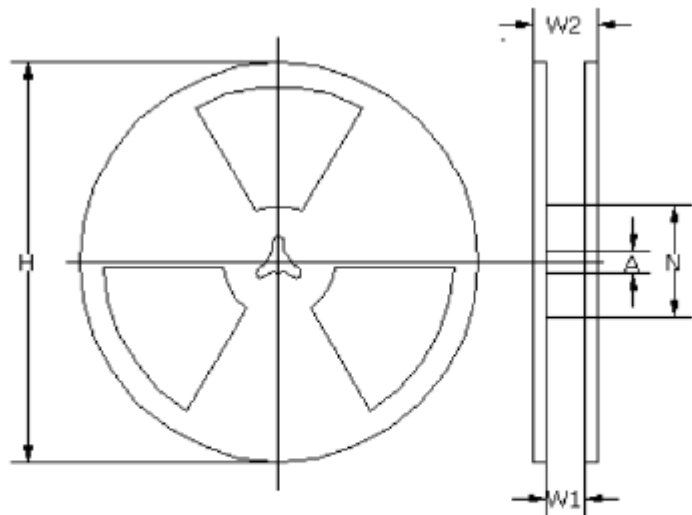


Marking Descriptions	
B	Series number 1
P	Series number 2
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
A, C, D, E, F, G, I, J, L	Ground
H	Rx Port(881.5MHz)
K	Antenna
B	Tx Port (836.5MHz)

# E. PACKING:

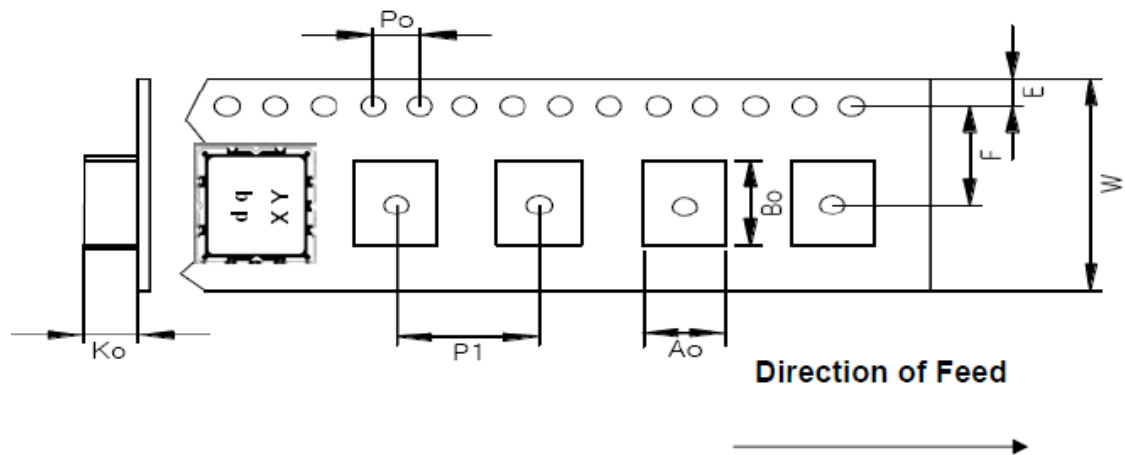
## 1. REEL DIMENSION



(Unit : mm)

A	N	H	W1	W2
$\Phi 13 \pm 0.5$	$\Phi 62 \pm 1.0$	$\Phi 330.0 \pm 1.0$	$12.0 \pm 1.0$	$16.0 \pm 1.0$

## 2. TAPE DIMENSION



A	B	K0	W	E	F	P0	P1
3.4±0.1	3.4±0.1	1.4±0.1	12.0±0.3	1.75±0.1	5.5±0.1	4.0±0.1	8.0±0.1

## F. RECOMMENDED REFLOW PROFILE :

