



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Name: Duplexer 707/737MHz 18MHz BW SMD 3.8×3.8 mm

TST Parts No.: TF0076A

Customer Part No.: _____

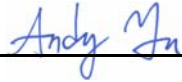
Customer signature required

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



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SAW Duplexer 707/737MHz 18MHz BW SMD 3.8×3.8 mm

MODEL NO.: TF0076A

REV. No.: 2.0

A. MAXIMUM RATING:

1. Maximum Input Power: 30 dBm
2. DC voltage: 0 V
3. Operating Temperature: 0°C to +50°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 /1pF (Single-ended)

Tx(707.0MHz) → Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	698.0 ~ 716.0	dB	-	1.9	3.0
Amplitude Ripple	698.0 ~ 716.0	dB _{p-p}	-	0.9	1.5
VSWR	698.0 ~ 716.0	-	-	1.8	2.2
Absolute Attenuation	728.0 ~ 746.0	dB	40	48	-

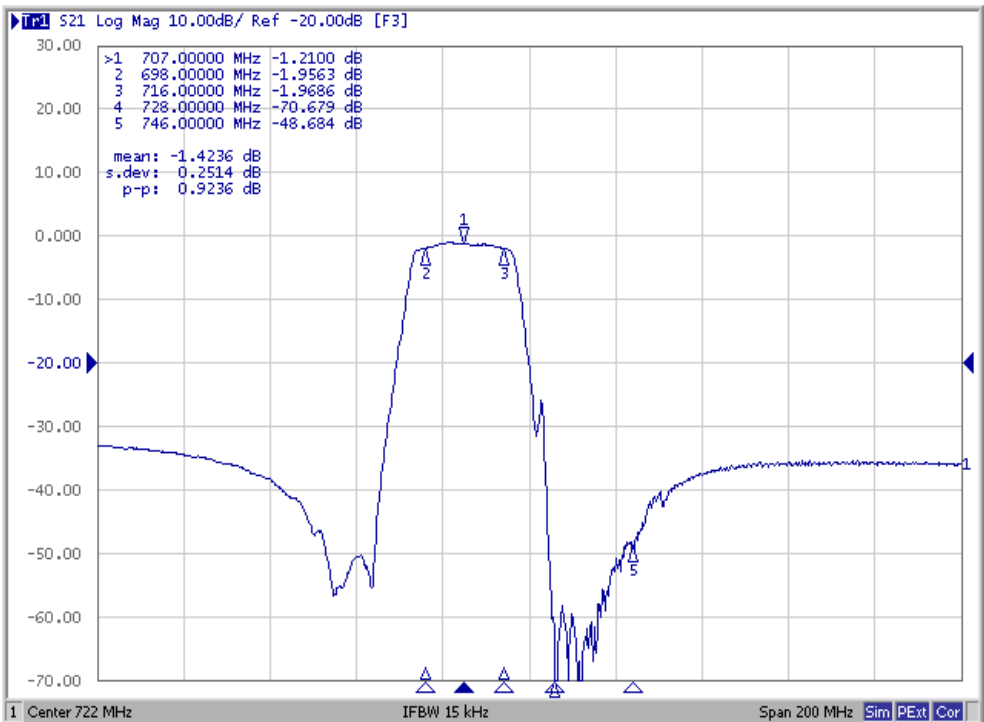
Ant → Rx(737.0MHz)		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	728.0 ~ 746.0	dB	-	1.9	3.0
Amplitude Ripple	728.0 ~ 746.0	dB _{p-p}	-	1.0	1.5
VSWR	728.0 ~ 746.0	-	-	1.7	2.2
Absolute Attenuation	698.0 ~ 716.0	dB	35	38	-

Tx → Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	698.0 ~ 716.0	dB	35	38	-
	716.0 ~ 728.0	dB	20	27	-
	728.0 ~ 746.0	dB	40	50	-

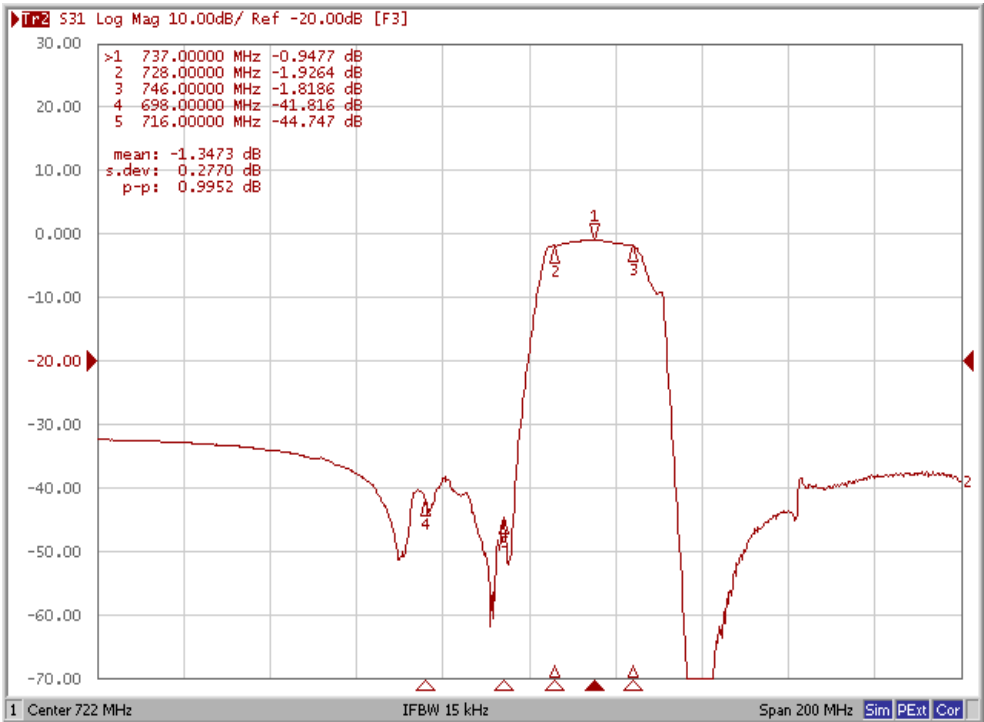
Notes : (1) With Matching Network .

C. Frequency Characteristics :

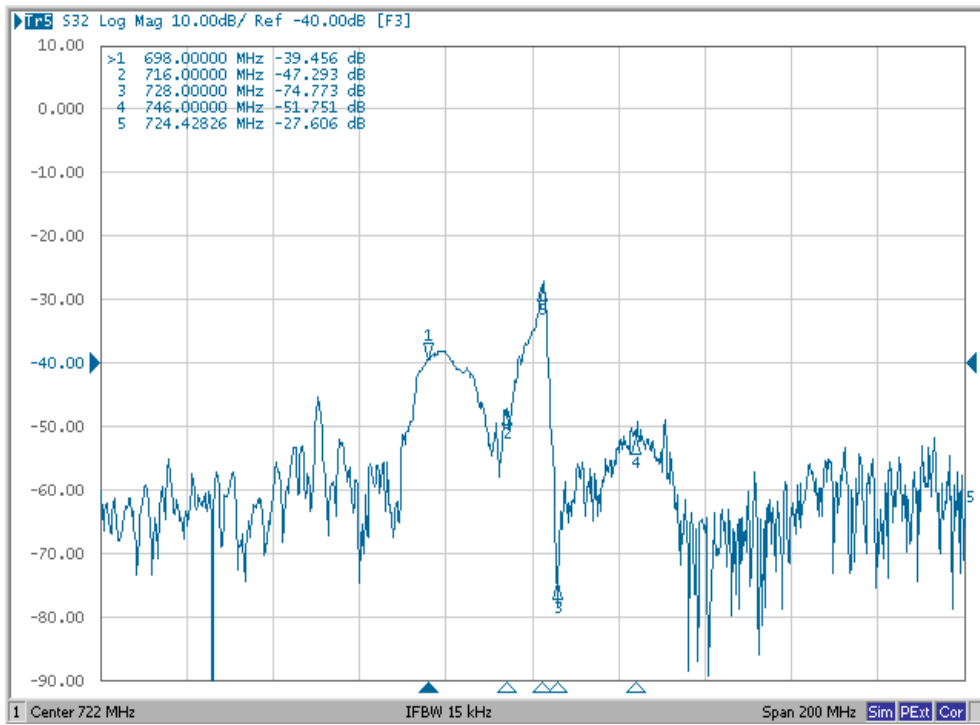
Tx Characteristic



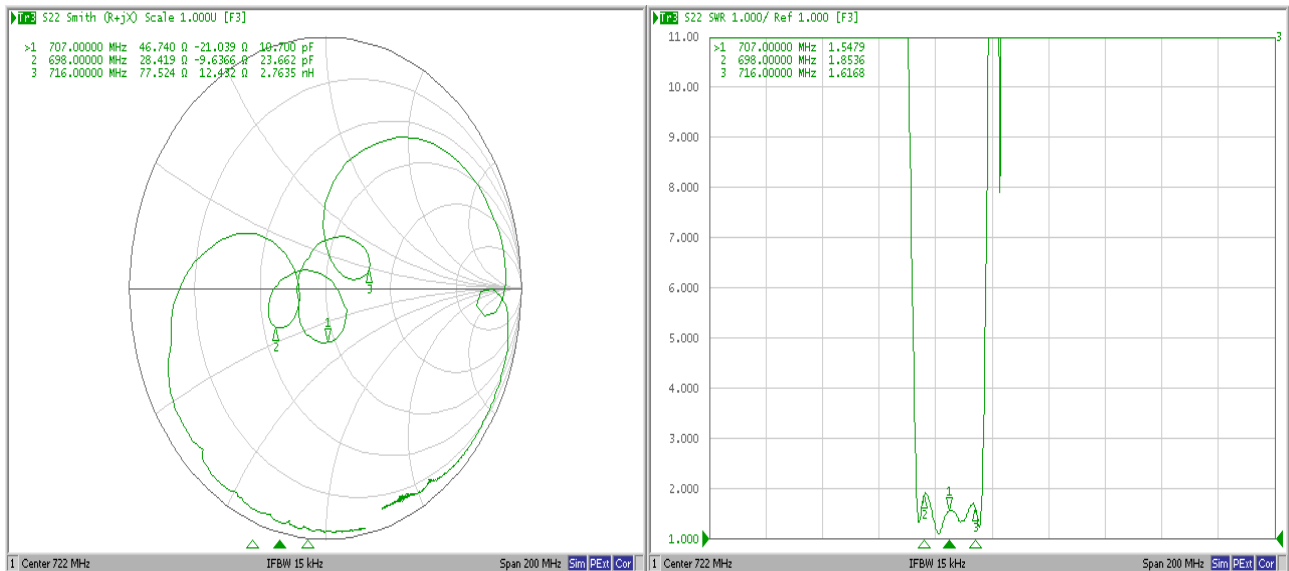
Rx Characteristic



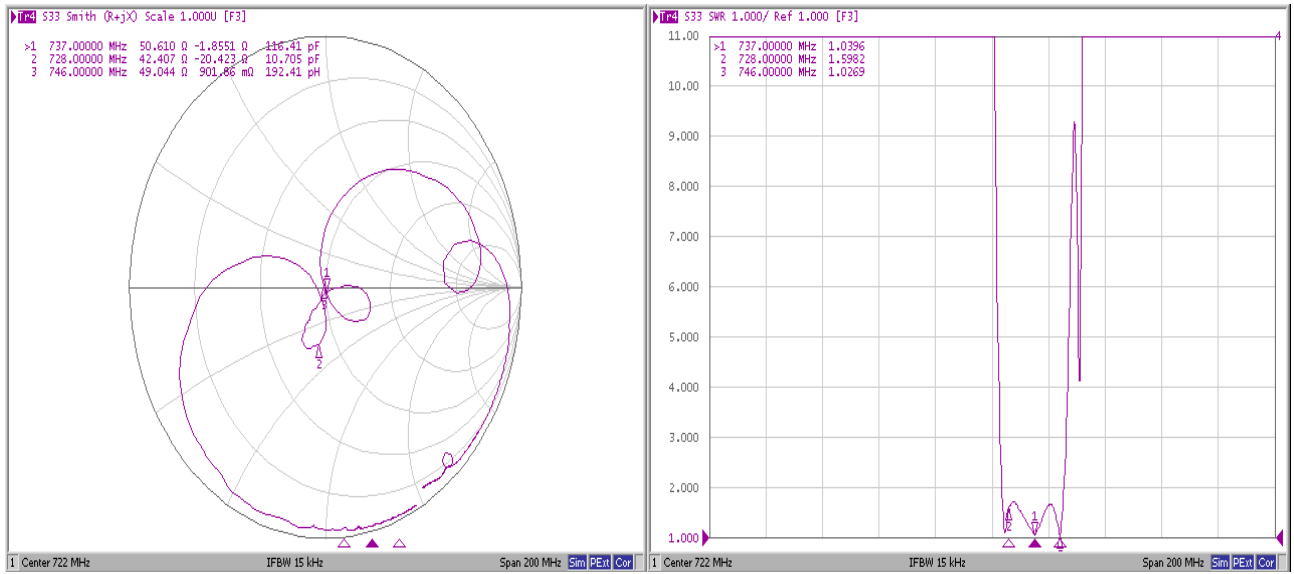
Isolation Characteristic



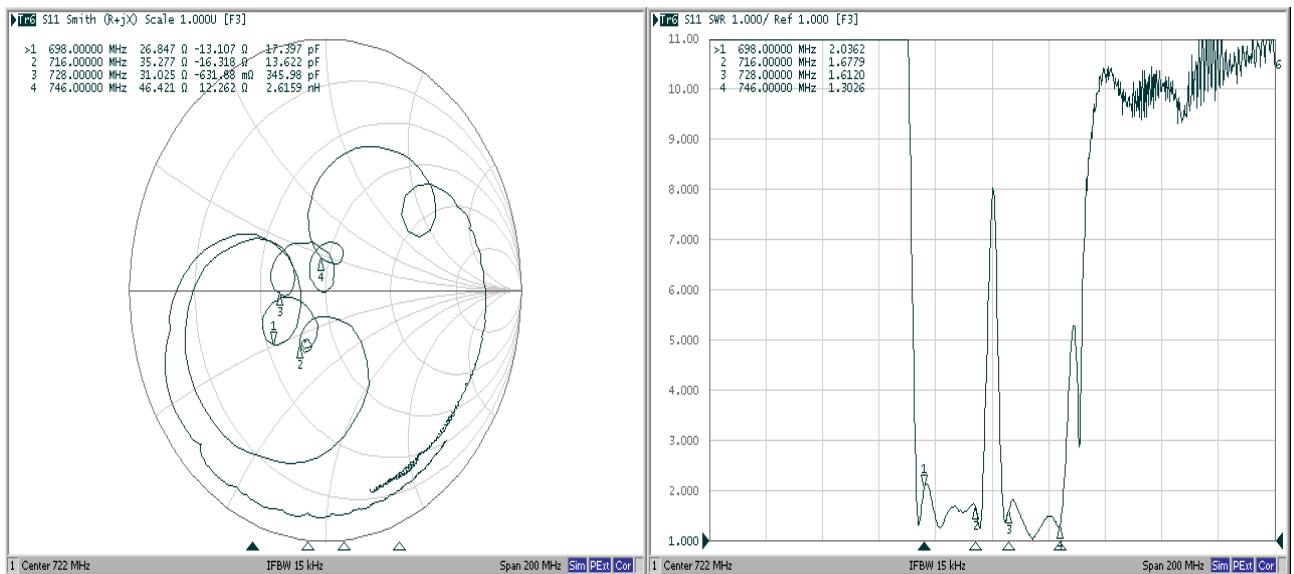
VSWR & Smith Chart



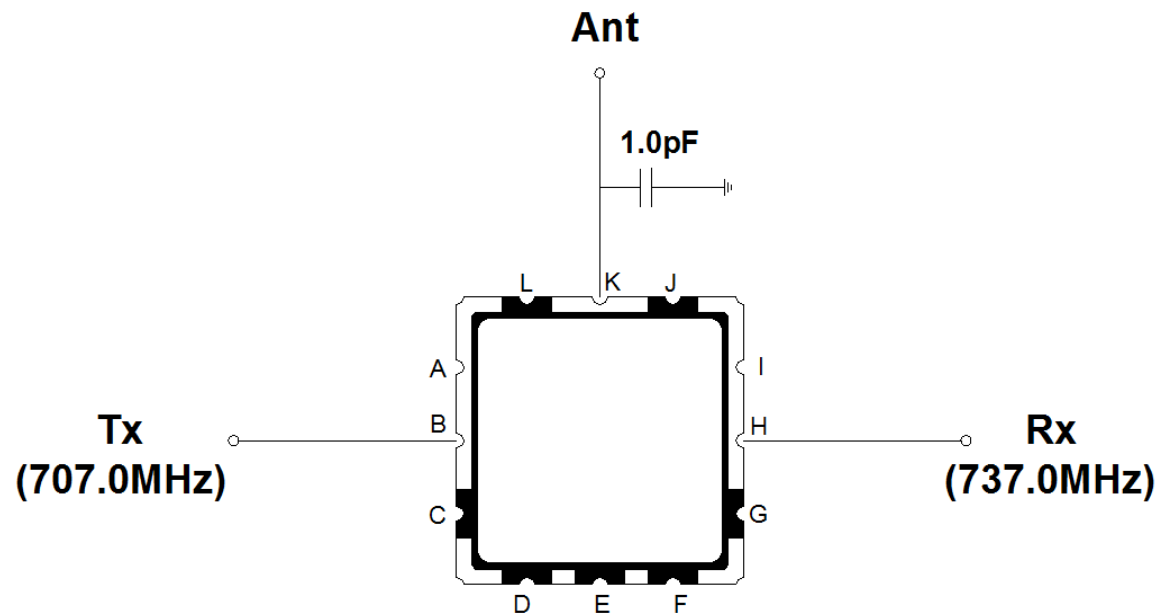
Rx Part



Antenna

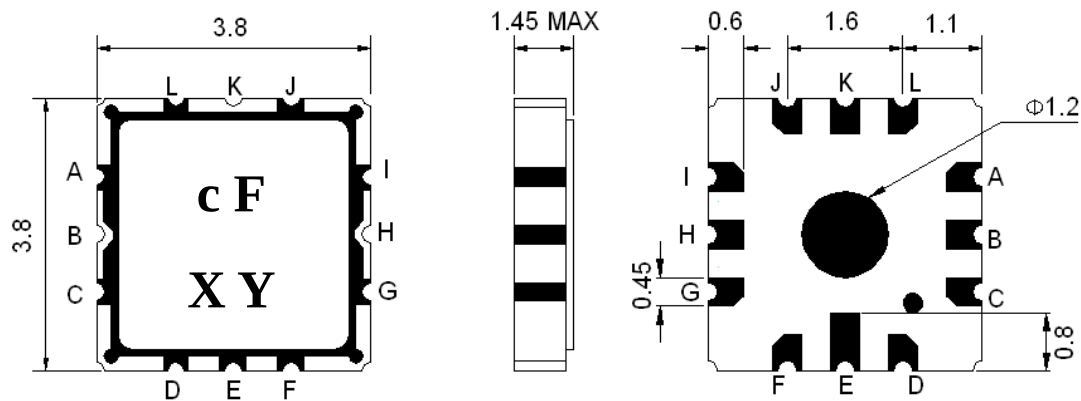


D. MEASUREMENT CIRCUIT:



E.OUTLINE DRAWING:

Unit: mm

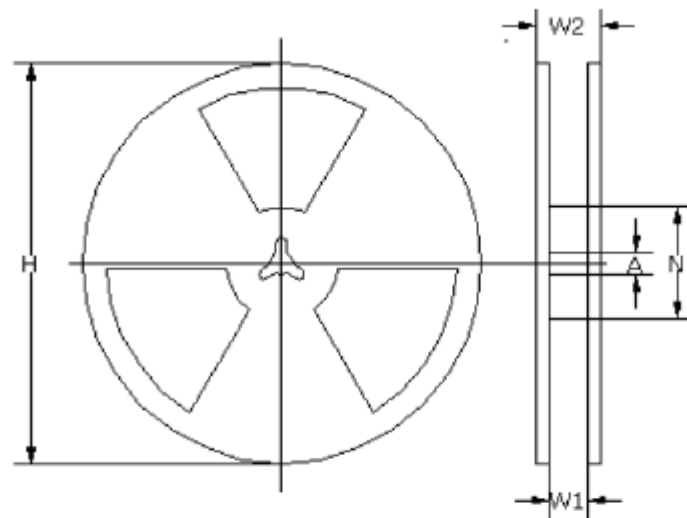


Marking Descriptions	
c	Series Number 1
F	Series Number 2
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
A, C, D, E, F, G, I, J, L	Ground
K	Ant
B	Rx (737.0MHz)
H	Tx (707.0 MHz)

E. PACKING:

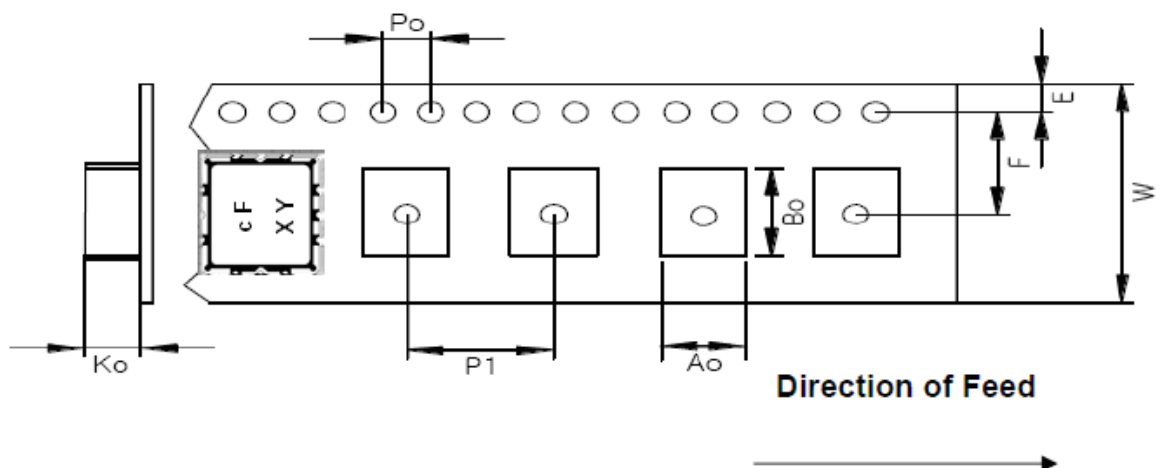
1. REEL DIMENSION



(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 ± 1.0	16.0 ± 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 :

