

# TAI-SAW TECHNOLOGY CO., LTD. No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District, Taoyuan, 324, Taiwan, R.O.C. TEL: 886-3-4690038 FAX: 886-3-4697532

TEL: 886-3-4690038 FAX: 886-3-4697532 E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

# **Product Specifications Approval Sheet**

Product Name: Duplexer 173	32.5/2132.5MHz	z 45MHz BW SMD	3.8×3.8 mm
TST Parts No.: TF0070A			
Customer Part No.:			_
			-
Customer signature required			
Company:			
Division:			
Approved by :			
Date:			
		11 1	_
Checked by:	Andy Yu	Andy In	_
Approved by:	Bob Chau	Skelm	_
Date:	2013. 11. 25		

- 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 1732.5/2132.5MHz 45MHz BW SMD 3.8×3.8 mm

MODEL NO.: TF0070A REV. No.: 1.0

#### A. MAXIMUM RATING:

1. Maximum Input Power: 28 dBm

2.DC voltage: 0 V

3. Operating Temperature: -30°C to +80°C 4.Storage Temperature: -40°C to +85°C

**RoHS Compliant** 

Lead-free soldering

#### **B. ELECTRICAL CHARACTERISTICS:**

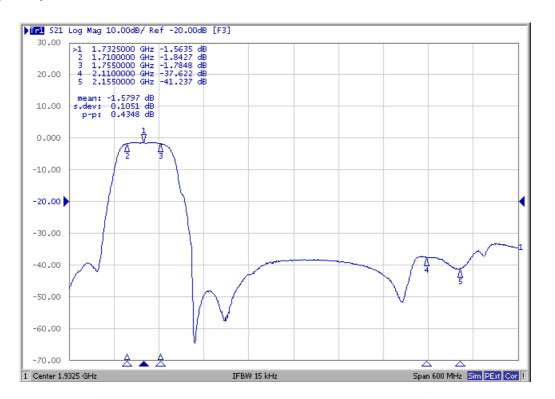
Tx(1732.5MHz) → Ant₽		Specifications₽			
Parameters Description₽ Condition [MHz]₽		Unit₽	Minimum₽	Typical₽	Maximum∂
Insertion Loss		dB₽	-47	1.9₽	3.0₽
<b>Amplitude Ripple</b> ₽ 1710.0 ~ 1755.0₽		dBpp₽₽	-43	0.6₽	1.5₽
VSWR <sup>₽</sup>	1710.0 ~ 1755.0°	-42	-47	1.7₽	2.2₽
Absolute Attenuation₽	2110.0 ~ 2155.0₽	dB₽	30₽	37₽	-47

Ant → Rx(2132.5MHz)₽		Specifications₽			
Parameters Description₽ Condition [MHz]₽		Unit₽	Minimum↔	Typical₽	Maximum₽
Insertion Loss∉	2110.0 ~ 2155.0₽	dB₽	-47	2.5₽	3.2₽
Amplitude Ripple₽	2110.0 ~ 2155.0₽	dBpp₽₽	-47	0.6₽	1.5₽
VSWR <sup>43</sup>	2110.0 ~ 2155.0°	-42	-47	1.7₽	2.2₽
Absolute Attenuation		dB₽	35₽	43₽	-47

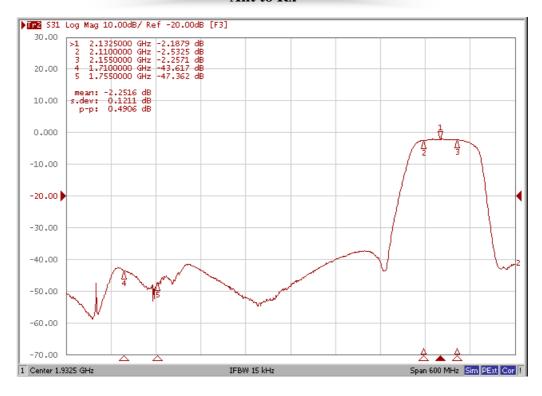
Rx →	Specifications₽				
Parameters Description₽ Condition [MHz]₽		Unit₽	Minimum⊲	Typical₽	Maximum∂
Isolation₽	1710.0 ~ 1755.0₽	dB₽	35₽	45₽	-47
	2110.0 ~ 2155.0₽	dB₽	30₽	38₽	-47

**Notes**: (1) With Matching Network.

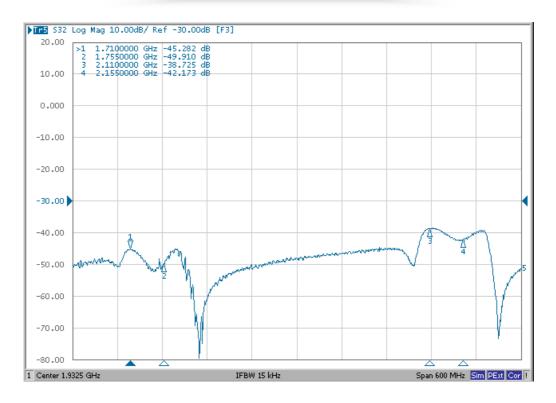
# C. Frequency Characteristics:



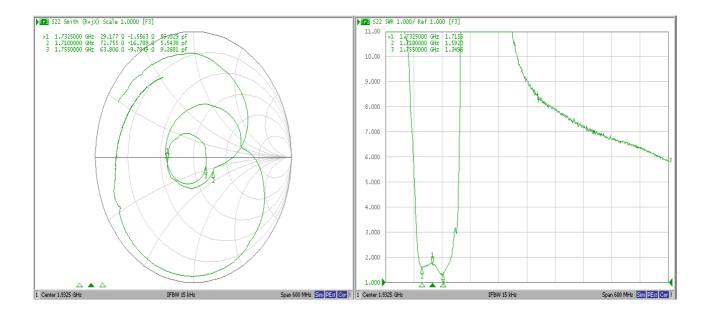
#### Ant to Rx



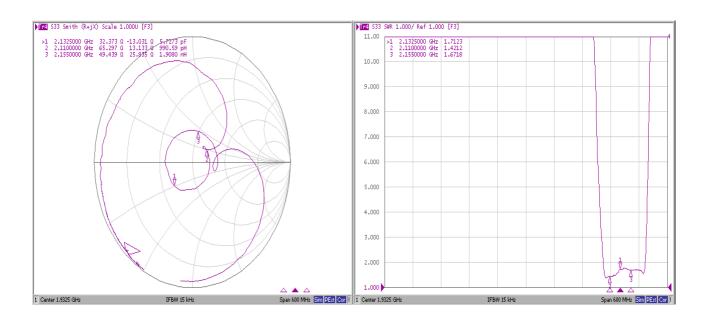
#### **Isolation**



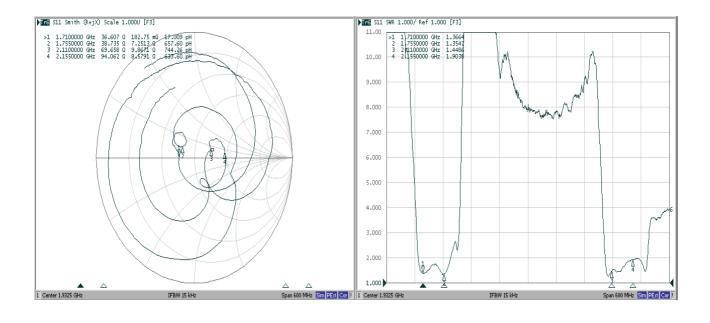
Tx Part



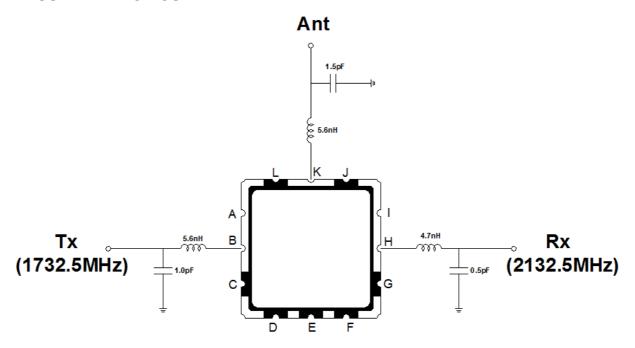
#### **Rx Part**



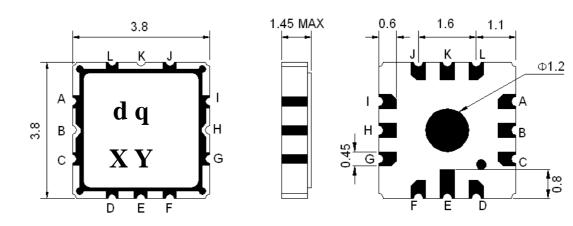
#### Antenna



#### D. MEASUREMENT CIRCUIT:



# **E.OUTLINE DRAWING:**

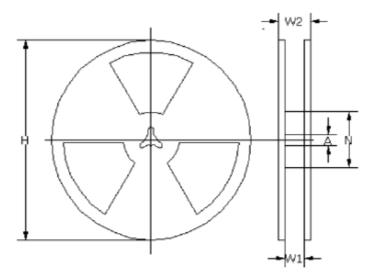


Marking Descriptions			
d	d Wireless Application		
q	Series Number		
X	Date Code(Year)		
Y	Date Code(Month)		

Pin Description				
A, C, D, E, F, G, I, J, L	Ground			
K	Ant			
В	Tx (1732.5 MHz)			
Н	Rx (2132.5MHz)			

# E. PACKING:

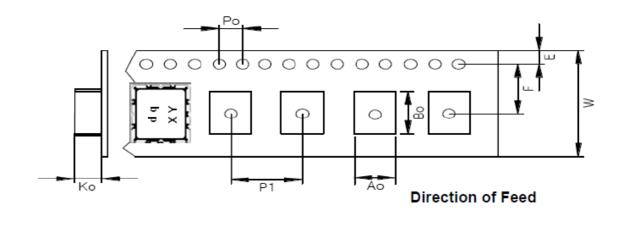
# 1. REEL DIMENSION



(Unit: mm)

A	И	Н	W1	W2	
Φ13±0.5	Φ62 ±1.0	Ф330.0±1.0	12.0±1.0	16.0±1.0	

# 2. TAPE DIMENSION



A	В	K0	W	Е	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:

