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 Web: www.taisaw.com

Product Specifications Approval Sheet

Product Name: SAW DPX 782/751MHz LTE Band 13 SMD 2016

TST Parts No.: TF0090A

Customer Part No.:_____

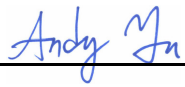
Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Andy Yu 

Approved by:_____ Bob Chau 

Date:_____ 2017/04/26

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 DPX 782/751MHz LTE Band 13 SMD 2016 (10MHz BW)

MODEL NO.: TF0090A REV. No.: 3.0

RoHS Compliant

Lead-free soldering

A. MAXIMUM RATING:

1. Maximum Input Power: 29 dBm
2. DC voltage: 0 V
3. Operating Temperature: -30℃ to +85℃
4. Storage Temperature: -40℃ to +85℃
5. Moisture Sensitivity Level: Level 1
6. ESD 100V(MM) 200V(HBM)

B. ELECTRICAL CHARACTERISTICS:

Terminating impedance(Tx Port): 50 Ω (Single-ended)
Terminating impedance(Rx Port): 100 Ω (Balanced-ended)
Terminating impedance(Ant Port): 50 Ω//10nH (Single-ended)

Tx to Ant

Parameters Description	Condition [MHz]	Unit	Mini.	Typical	Max.
Insertion Loss	777.0 ~ 787.0	dB	-	1.5	2.0
Ripple	777.0 ~ 787.0	dB_{p-p}	-	0.4	1.0
VSWR of Ant Port	777.0 ~ 787.0	-	-	1.5	2.0
VSWR of Tx Port	777.0 ~ 787.0	-	-	1.5	2.0
Attenuation:					
746.0 ~ 756.0 MHz		dB	45	50	-
758.0 ~ 768.0 MHz		dB	40	45	-
808.0 ~ 818.0 MHz		dB	35	40	-
869.0 ~ 894.0 MHz		dB	25	30	-
1554.0 ~ 1574.0 MHz		dB	50	55	-

Ant to Rx

Parameters Description		Condition [MHz]	Unit	Mini.	Typical	Max.
Insertion Loss		746.0 ~ 756.0	dB	-	1.7	2.2
Ripple		746.0 ~ 756.0	dB_{p-p}	-	0.2	0.9
VSWR	**Ant**	746.0 ~ 756.0	-	-	1.4	2.0
	Rx	746.0 ~ 756.0	-	-	1.4	2.0
Attenuation						
777.0 ~ 787.0 MHz			dB	50	55	-
808.0 ~ 818.0 MHz			dB	42	47	-
1400.0 ~ 3000.0 MHz			dB	47	50	-
3000.0 ~ 4000.0 MHz			dB	46	49	
4000.0 ~ 6000.0 MHz			dB	45	48	-
Amplitude balance($\|S_{31}/S_{41}\|$)		746.0 ~ 756.0	dB	-1.0	-0.2/+0.2	+1.0
Phase balance $\Phi(S_{31})-\Phi(S_{41})+180°$		746.0 ~ 756.0	deg	-10	-3/+1	+10

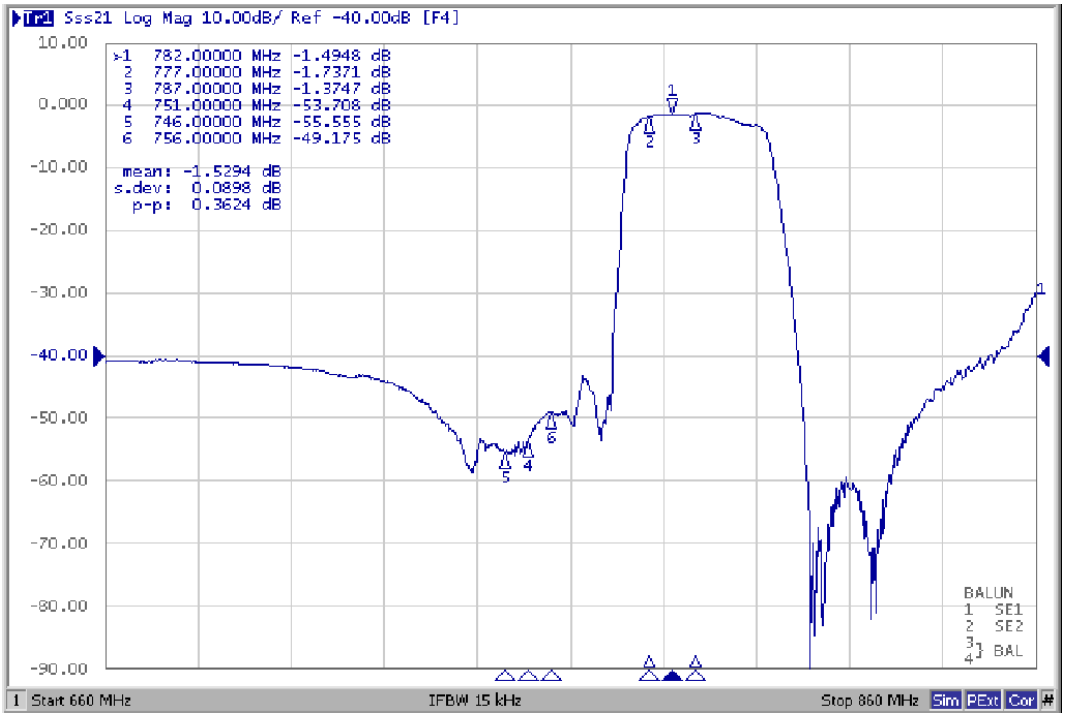
Tx to Rx

Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation in Tx Band	777.0 ~ 787.0	dB	57	59	-
Isolation in Rx Band	746.0 ~ 756.0	dB	49	52	-

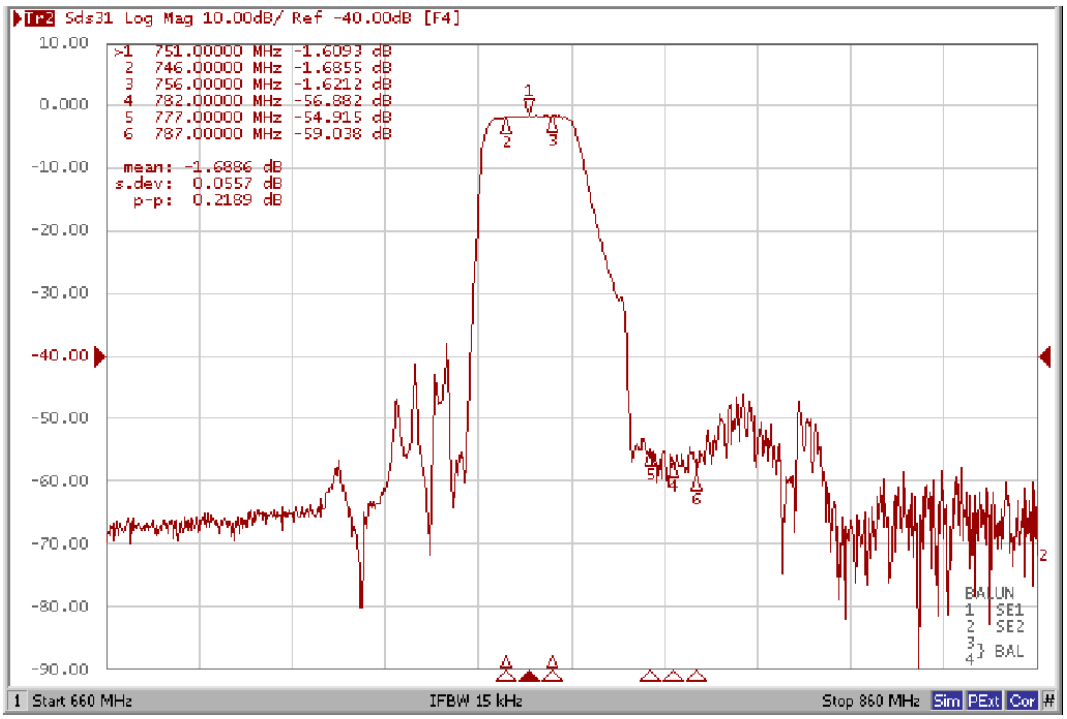
Notes : (1) With Matching Network .

C. Frequency Characteristics :

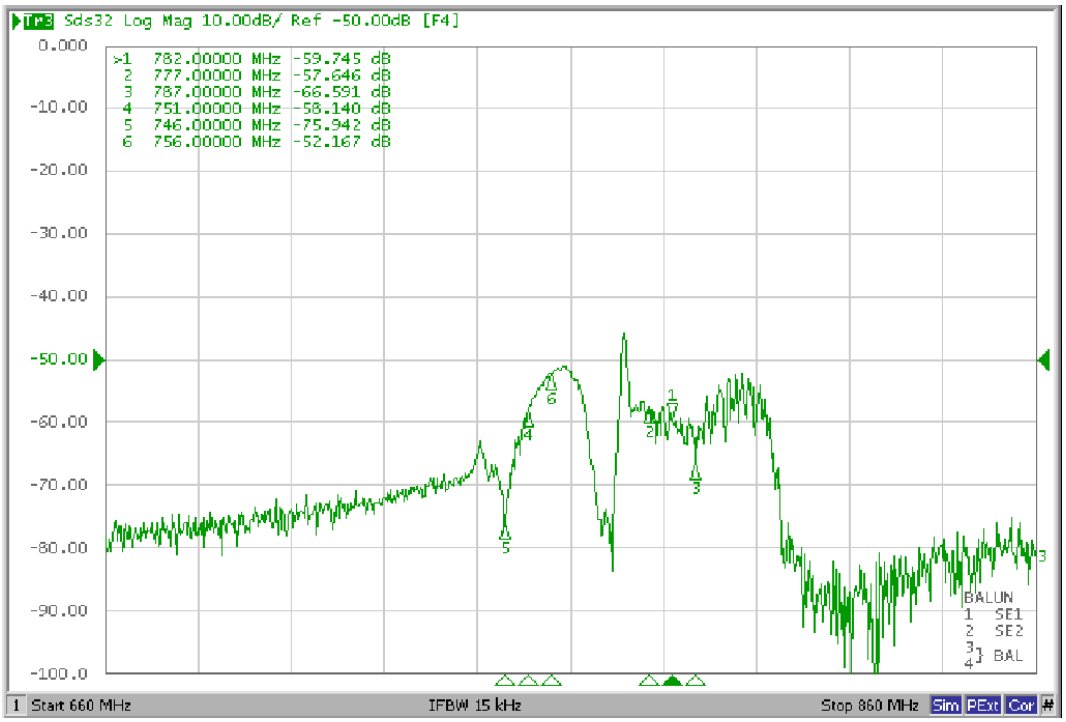
Tx to Ant



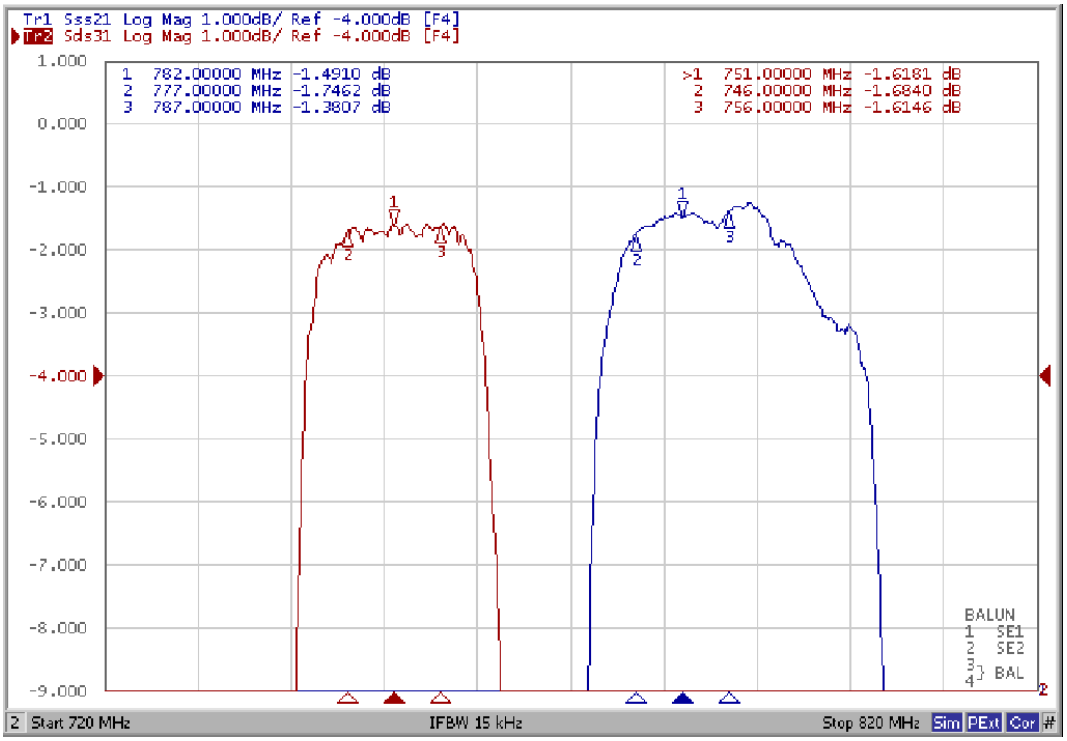
Ant to Rx



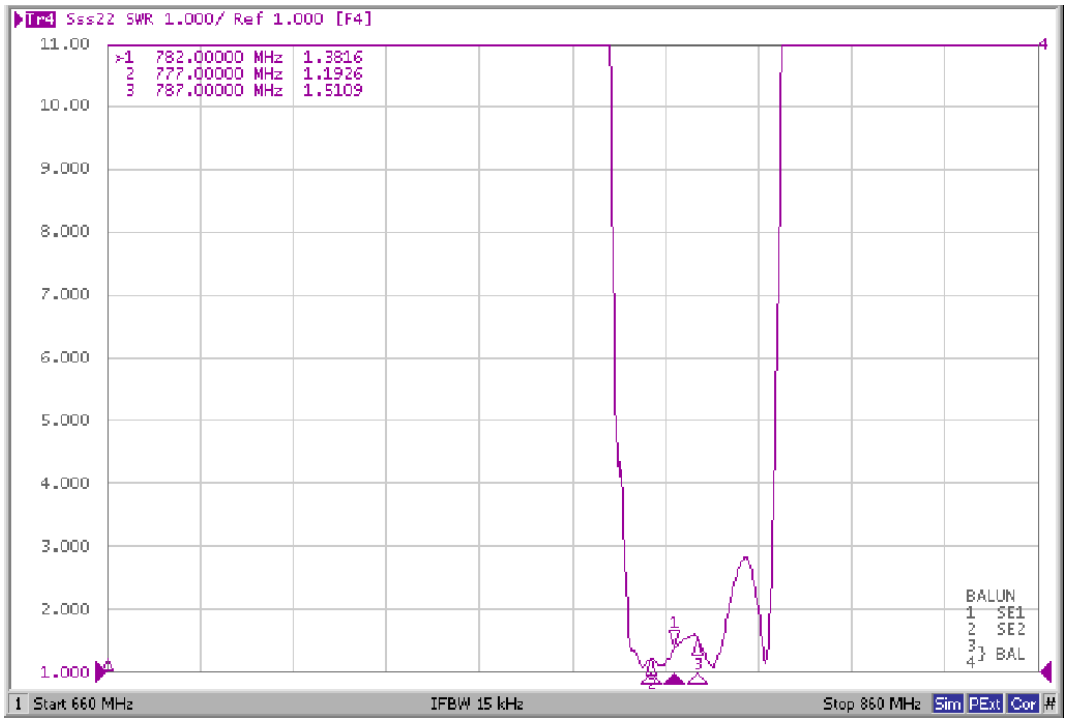
Isolation



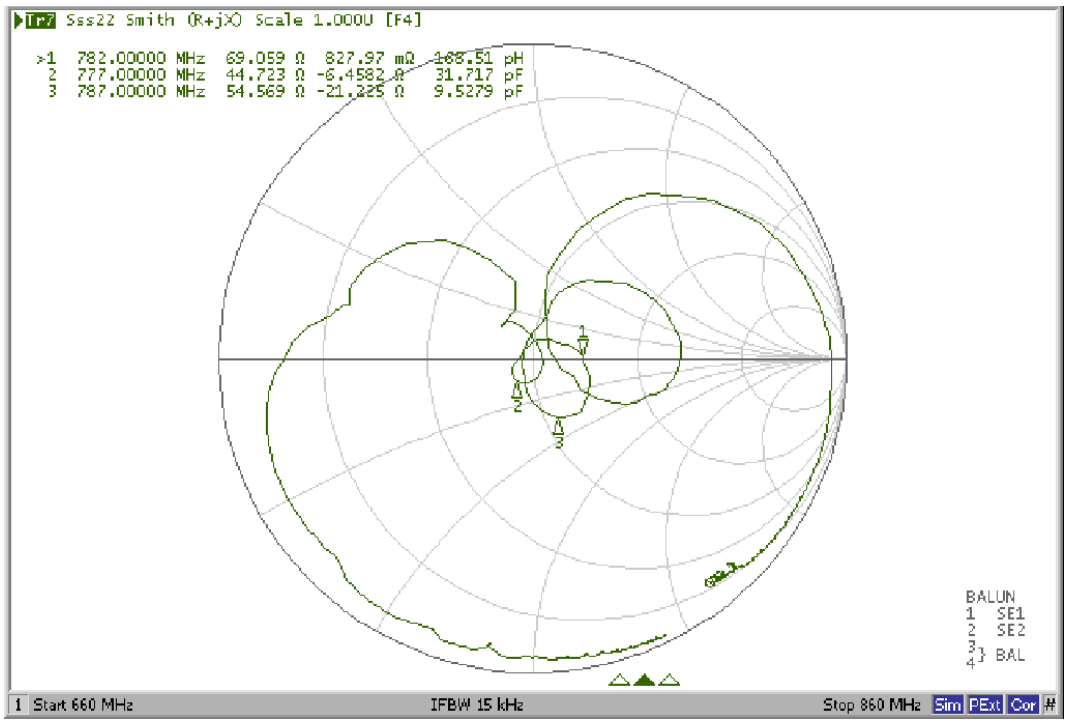
Ripple



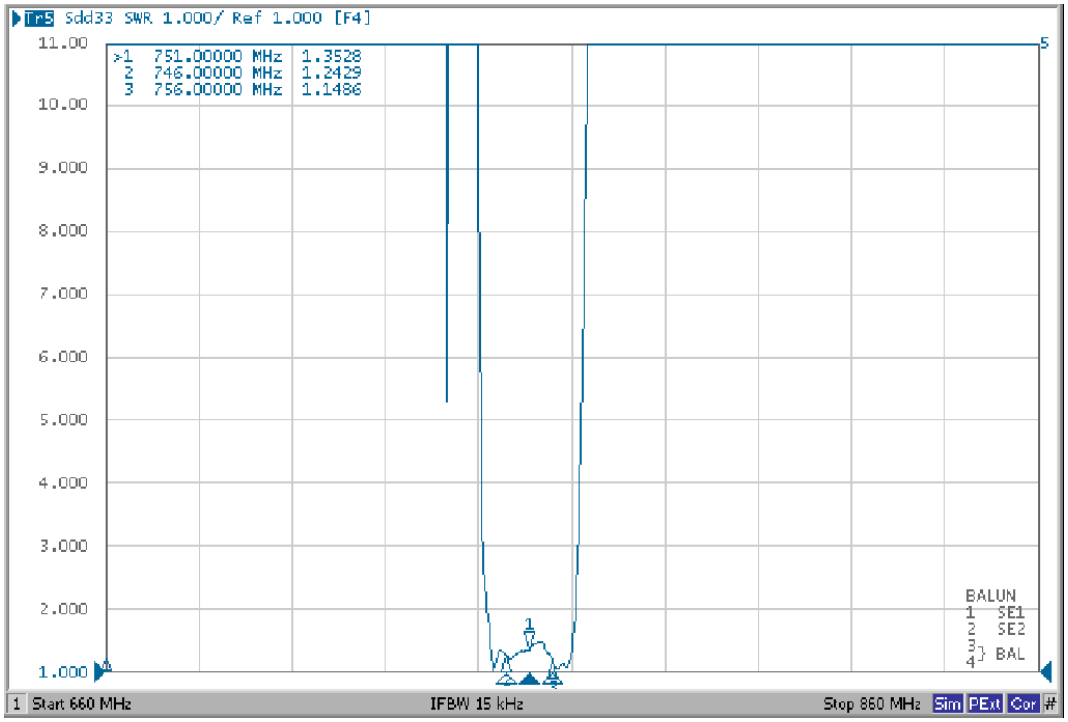
VSWR (Tx Port)



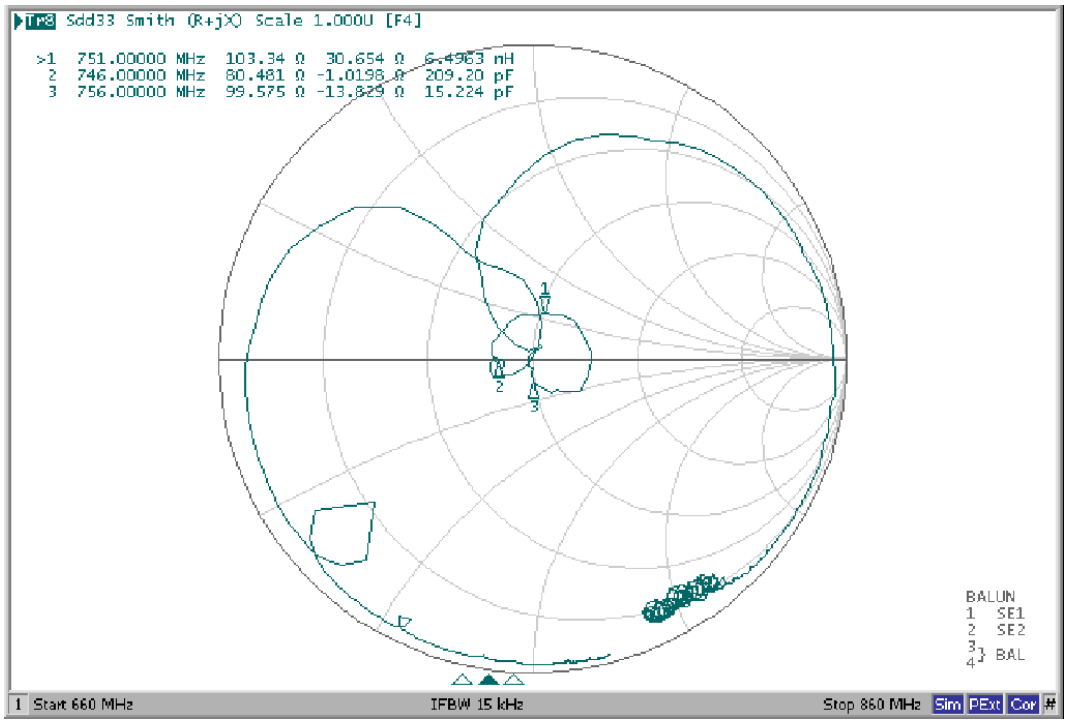
Smith Chart (Tx Port)



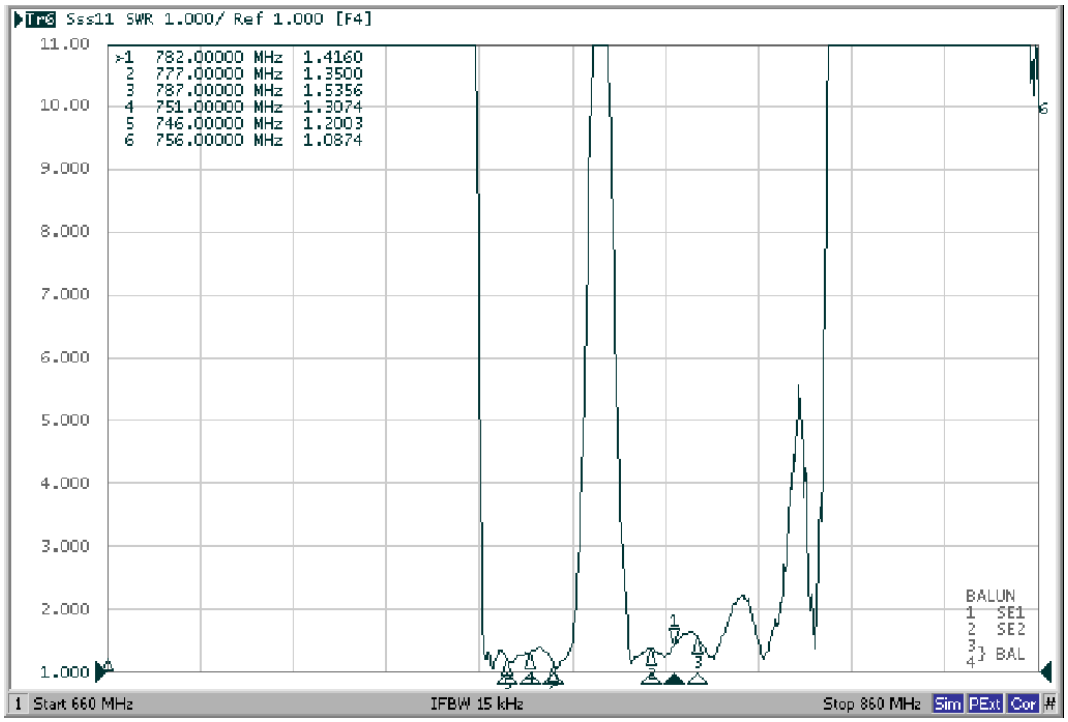
VSWR (Rx Port)



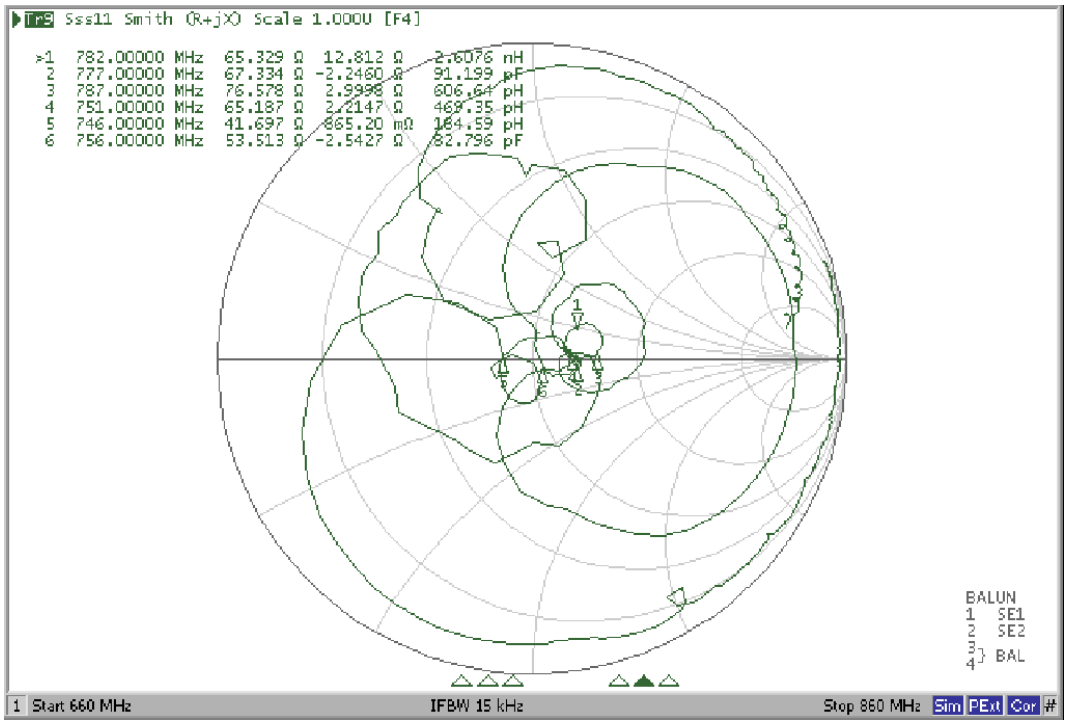
Smith Chart (Rx Port)



VSWR (ANT Port)

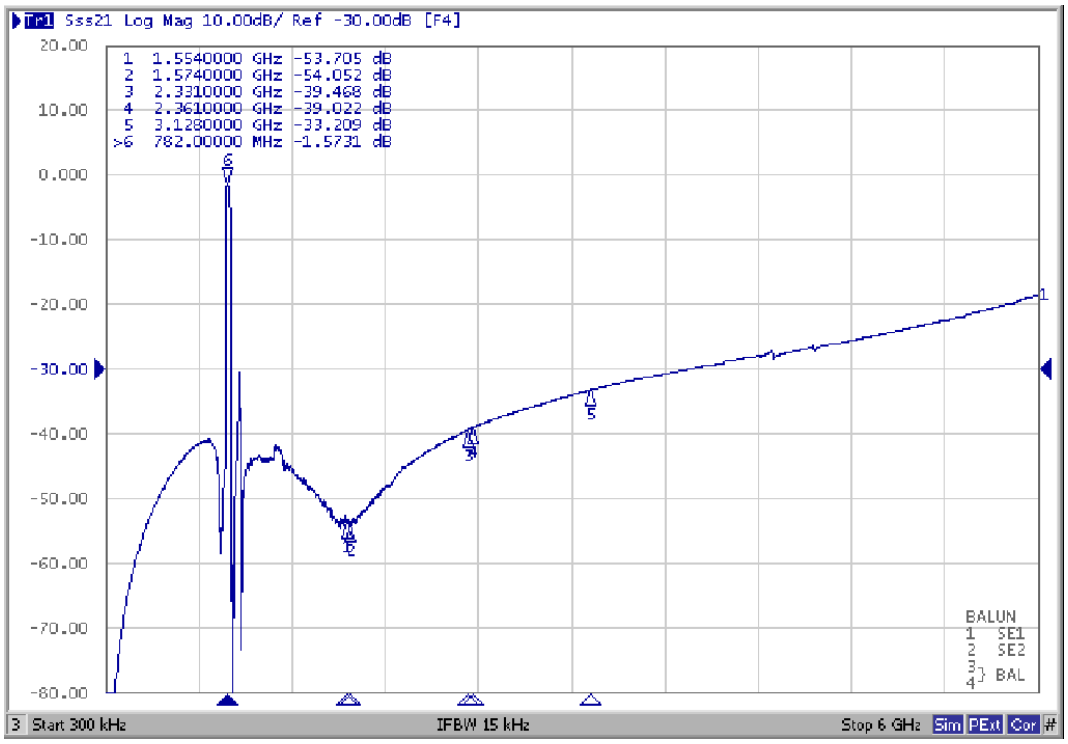


Smith Chart (ANT Port)

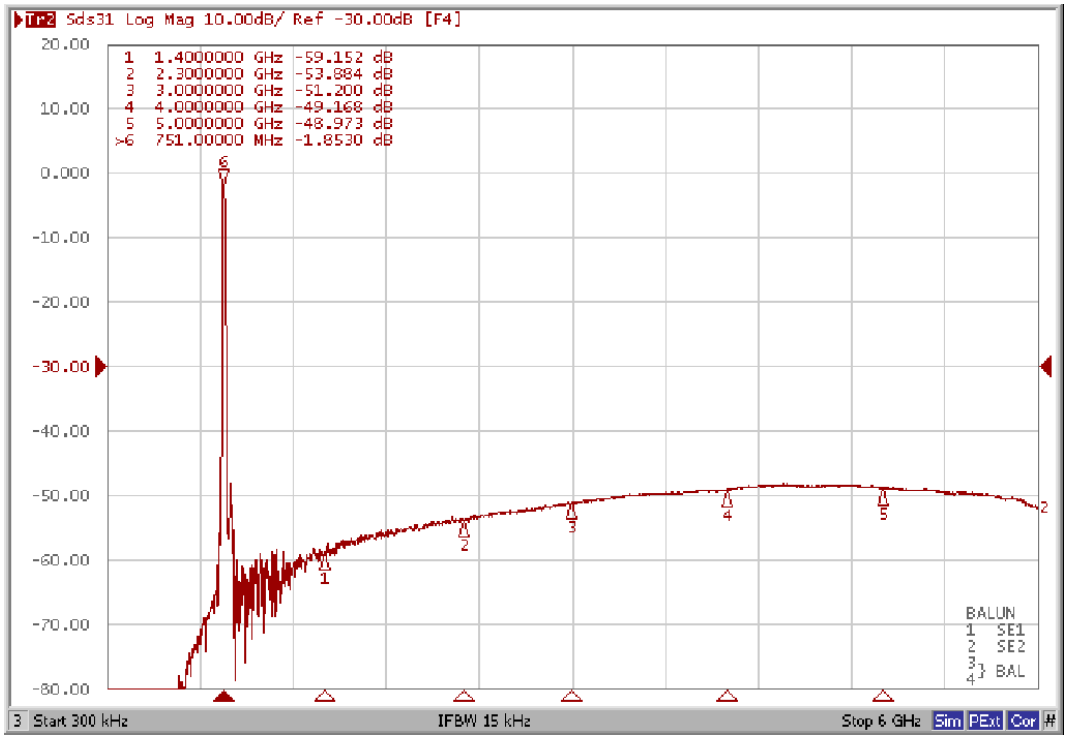


Wide Span

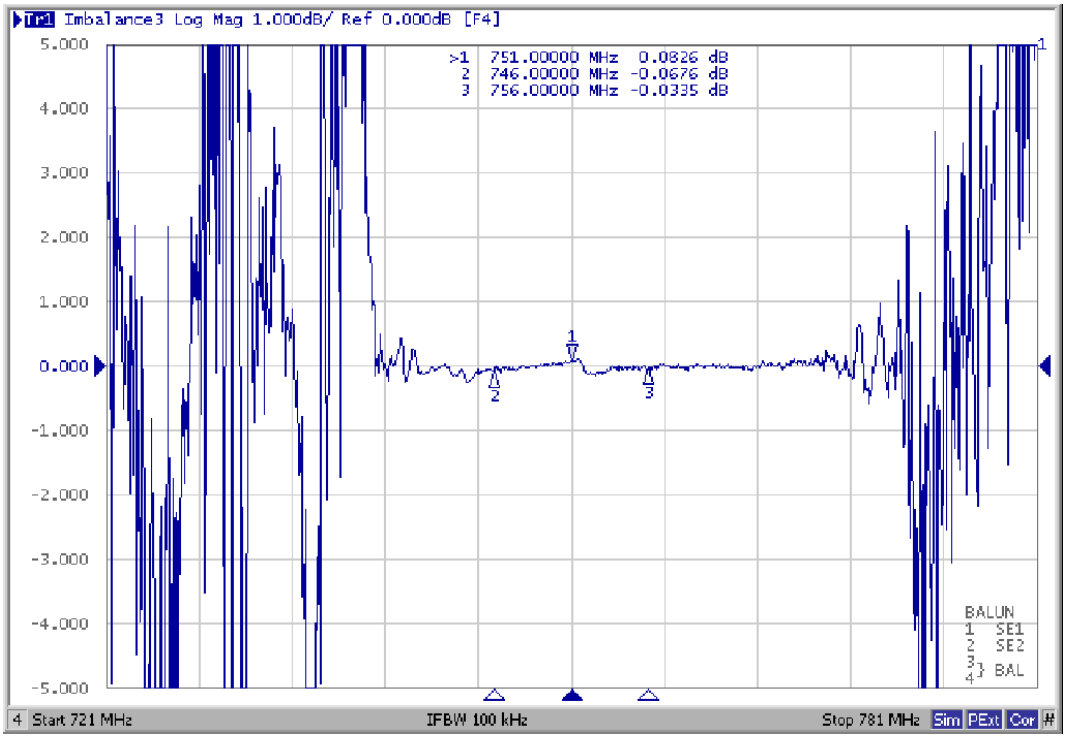
Tx:



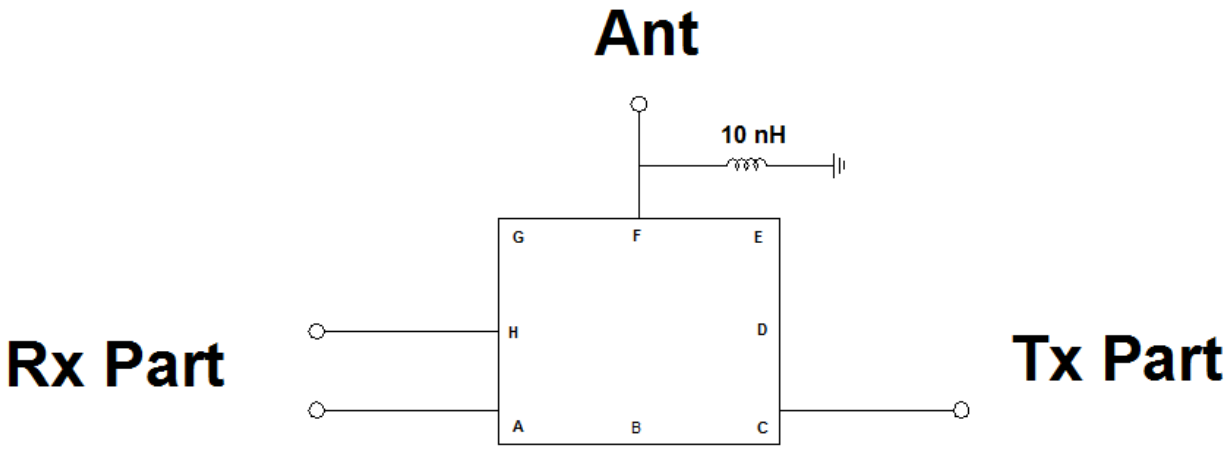
Rx:



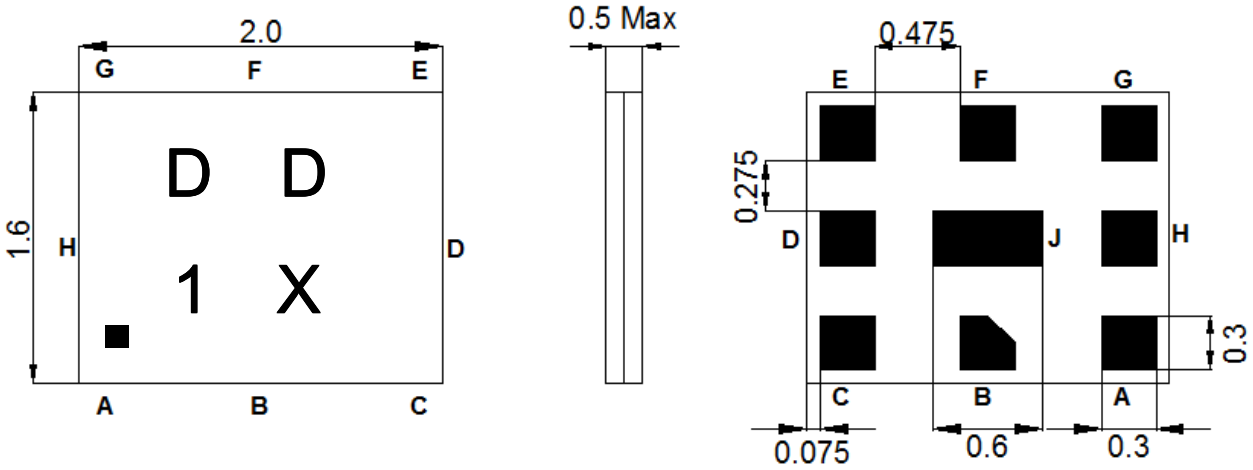
Amplitude balance of Ant to Rx+/Rx-



D. MEASUREMENT CIRCUIT:



E.OUTLINE DRAWING:



Marking Descriptions	
D	Duplexer Application
D	Band Class
1	Series Number
X	Date Code(Year+Month)

Pin Description	
B,D,E,G,J	Ground
F	Ant
C	Tx (782MHz)
A,H	Rx (751MHz)

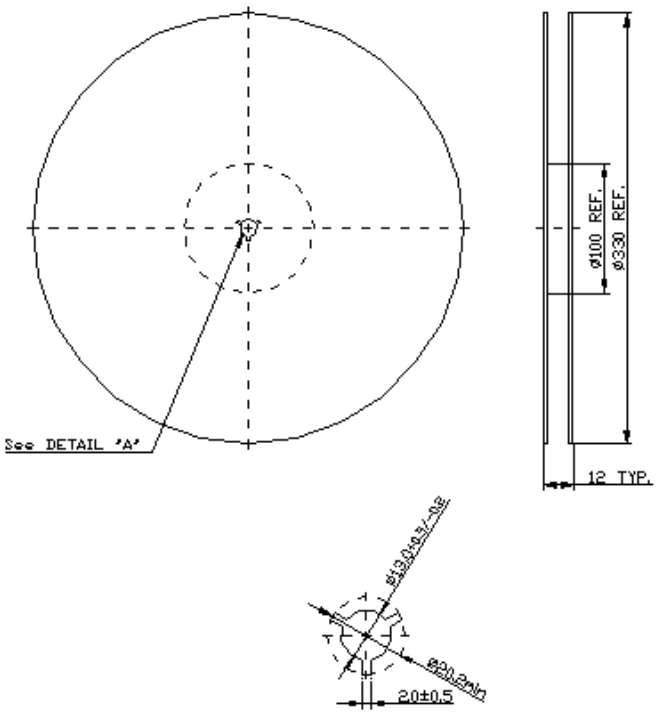
Product Date Code. Follow below table.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	∇	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m

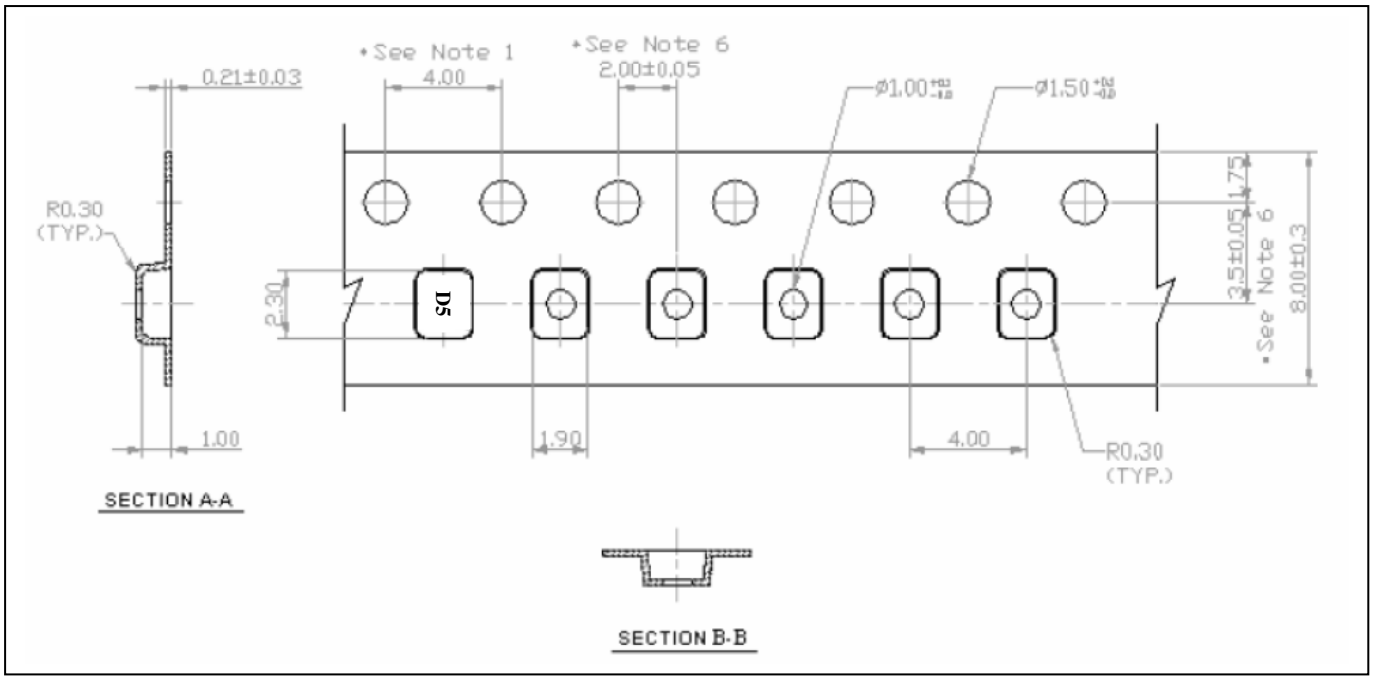
E. PACKING:

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



2.TAPE DIMENSION



F. RECOMMENDED REFLOW PROFILE :