

SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

Part No: MP06682

Rev. No: 1

A. MAXIMUM RATING:

Electrostatic Sensitive Device (ESD)

1. Input power (2500 ~ 2570MHz): +29dBm, +50°C, 50khours, CW dBm
2. Operating Temperature: -20°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

1. Terminating impedance (Tx Port): 50Ω (Single-ended)
2. Terminating impedance (Rx Port): 50Ω (Single-ended)
3. Terminating impedance (Ant Port): 50//2.7nH Ω (Single-ended)

Tx to ANT

Parameters Description			Unit	Min.	Typ.	Max.
Insertion Loss		2500 ~ 2510MHz	dB(*1)	-	2.1	3.0
		2510 ~ 2570MHz	dB(*1)		1.6	2.4
Ripple		2500 ~ 2570MHz	dB	-	1.2	2.3
VSWR	ANT	2500 ~ 2570MHz	-	-	1.7	2.1
	Tx		-	-	1.8	2.3
Attenuation:						
10 ~ 1565.42MHz			dB	30	41	-
1565.42 ~ 1573.374MHz			dB	35	41	-
1573.374 ~ 1577.466MHz			dB	35	41	-
1577.466 ~ 1585.42MHz			dB	35	41	-
1597.5515 ~ 1605.886MHz			dB	35	40	-
1605.886 ~ 1680MHz			dB	25	40	-
1805 ~ 1880MHz			dB	30	38	-
1900 ~ 1920MHz			dB	30	38	-
2010 ~ 2025MHz			dB	30	37	-
2110 ~ 2170MHz			dB	30	37	-
2401 ~ 2473MHz			dB(*2)	35	45	-
2456 ~ 2478MHz			dB(*2)	30	45	-
2461 ~ 2483MHz			dB(*2)	20	40	-
2474 ~ 2500MHz			dB	1	2	-
2590 ~ 2620MHz			dB	1	6	-
2620 ~ 2690MHz			dB	45	55	-

SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

Part No: MP06682

Rev. No: 1

4900 ~ 5950MHz	dB	20	49	-
5000 ~ 5140MHz	dB	25	50	-
5100 ~ 5280MHz	dB	35	51	-
7500 ~ 7710MHz	dB	25	40	-

(*1) Specification of insertion loss excludes loss that comes from the test board.

(*2) Integrated attenuation over 22MHz BW.

ANT to Rx

Parameters Description		Unit	Min.	Typ.	Max.
Insertion Loss	2620 ~ 2690MHz	dB(*1)	-	2.3	2.9
VSWR	ANT	2620 ~ 2690MHz	-	1.9	2.3
	Rx	2620 ~ 2690MHz	-	1.9	2.3
Attenuation:					
1 ~ 2500MHz		dB	40	48	-
45MHz		dB	50	100	-
832 ~ 862MHz		dB	40	65	-
1710 ~ 1785MHz		dB	40	57	-
2500 ~ 2570MHz		dB	42	48	-
2775 ~ 6000MHz		dB	30	50	-
2400 ~ 2500MHz		dB	40	48	-
4950 ~ 5950MHz		dB	40	58	-
7620 ~ 7830MHz		dB	40	55	-
7860 ~ 8070MHz		dB	40	55	-

Tx to Rx

Isolation	2500 ~ 2570MHz	dB	50	53	-
	2620 ~ 2690MHz	dB	50	57	-
	1574 ~ 1577MHz	dB	40	62	-
	5000 ~ 5140MHz	dB	30	44	-
	7500 ~ 7710MHz	dB	30	40	-

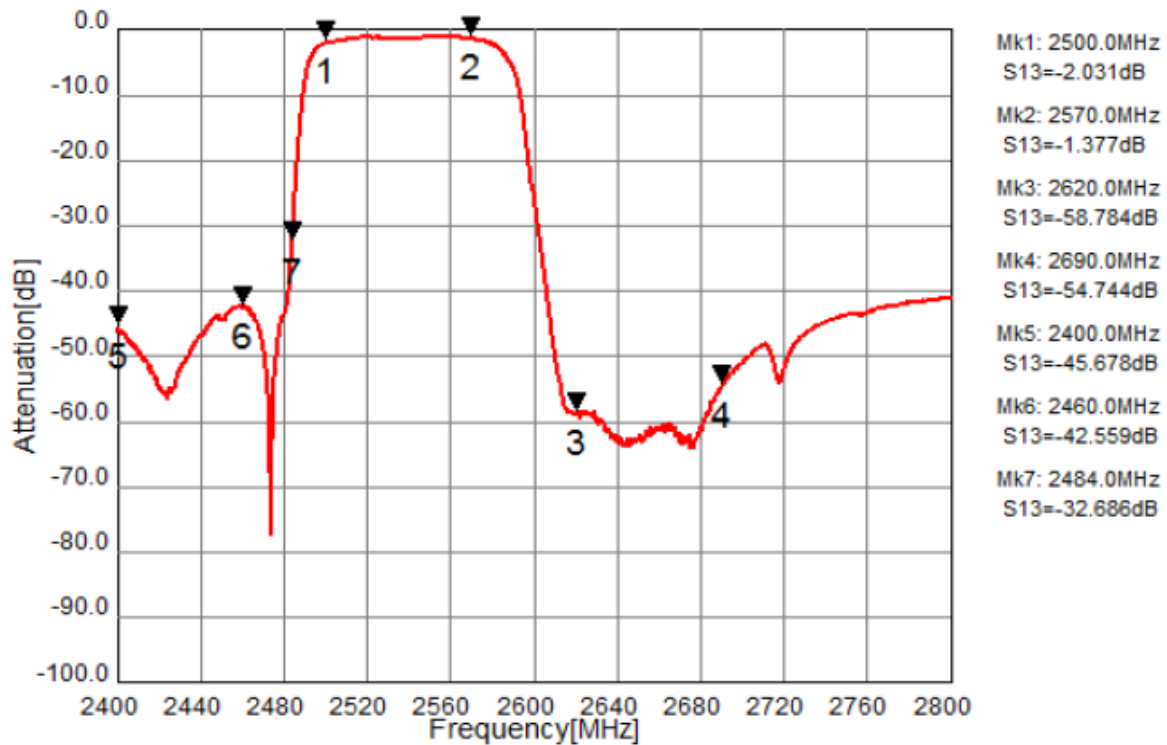
(*1) Specification of insertion loss excludes loss that comes from the test board.

SAW Duplexer 2535.0 /2655.0MHz
Part No: MP06682

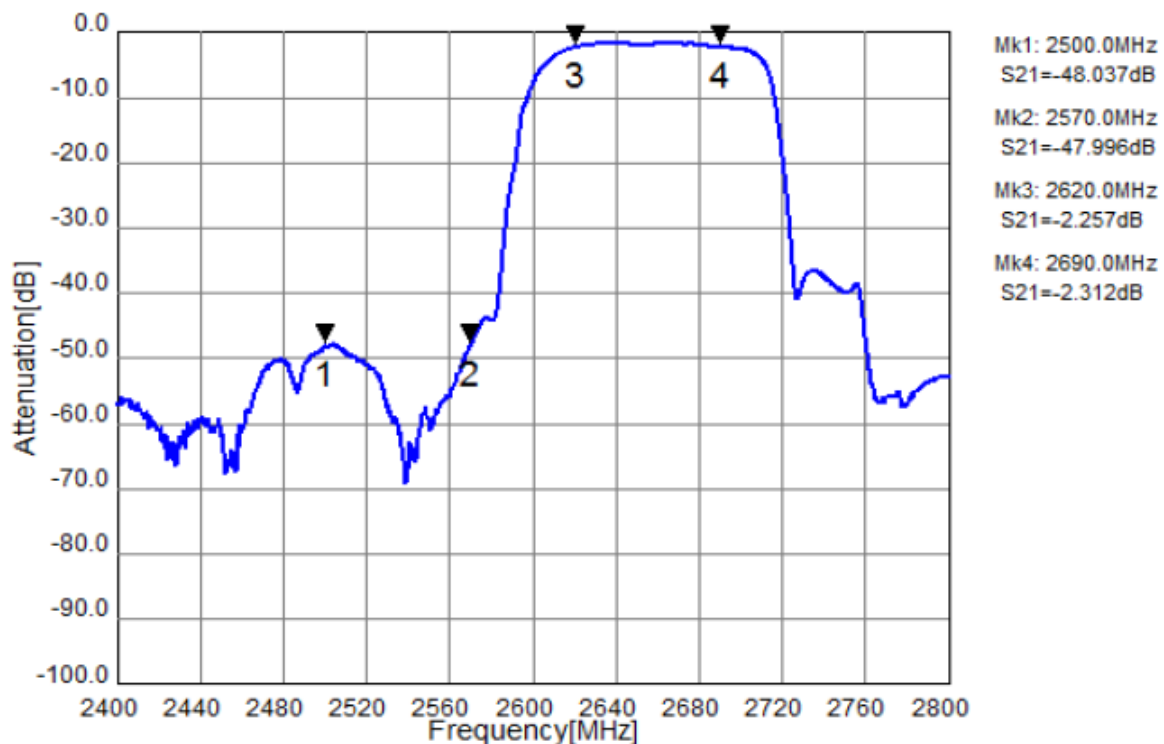
Model: TF0109A
Rev. No: 1

C. FREQUENCY CHARACTERISTICS:

Tx to Ant



Ant to Rx

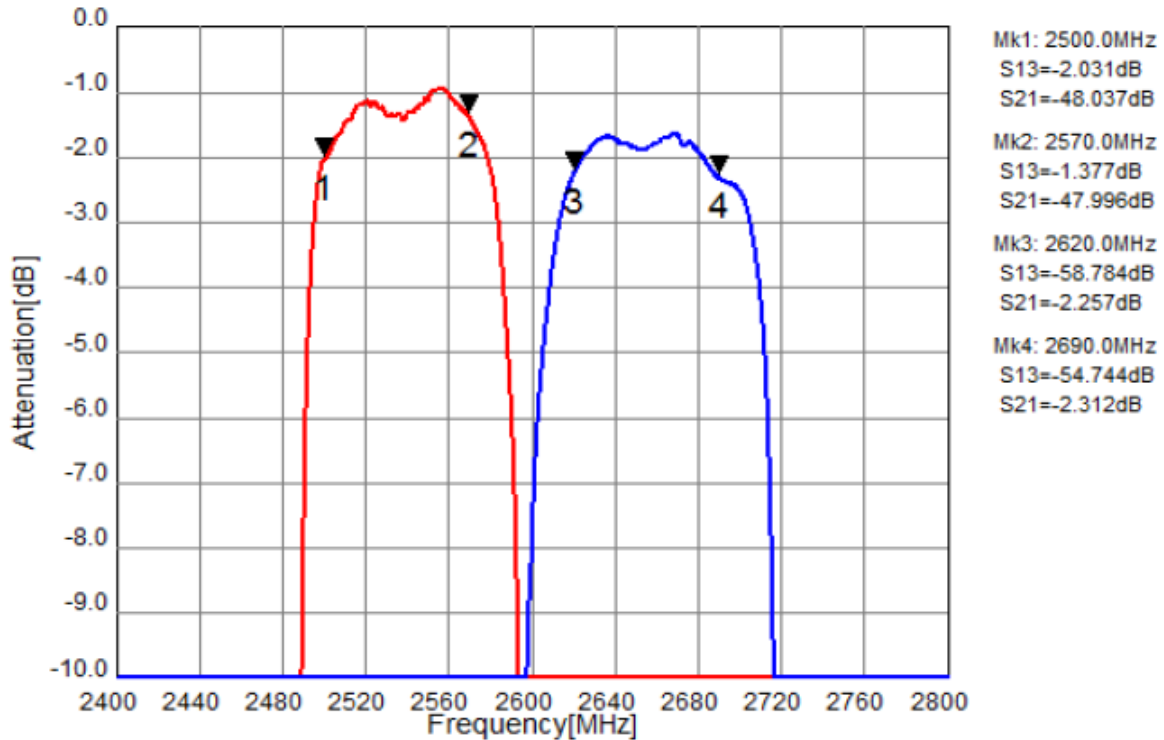


These data exclude loss that comes from the test board.

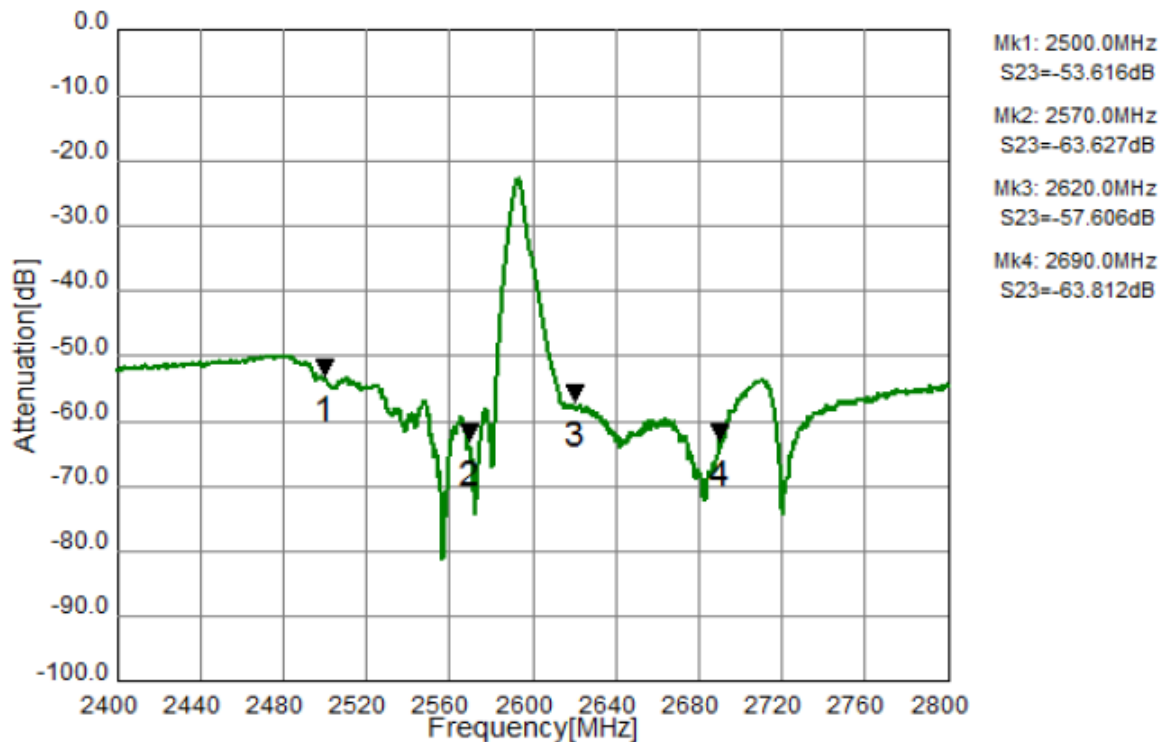
SAW Duplexer 2535.0 /2655.0MHz
Part No: MP06682

Model: TF0109A
Rev. No: 1

Tx to Ant, Ant to Rx



Tx to Rx Isolation



These data exclude loss that comes from the test board.

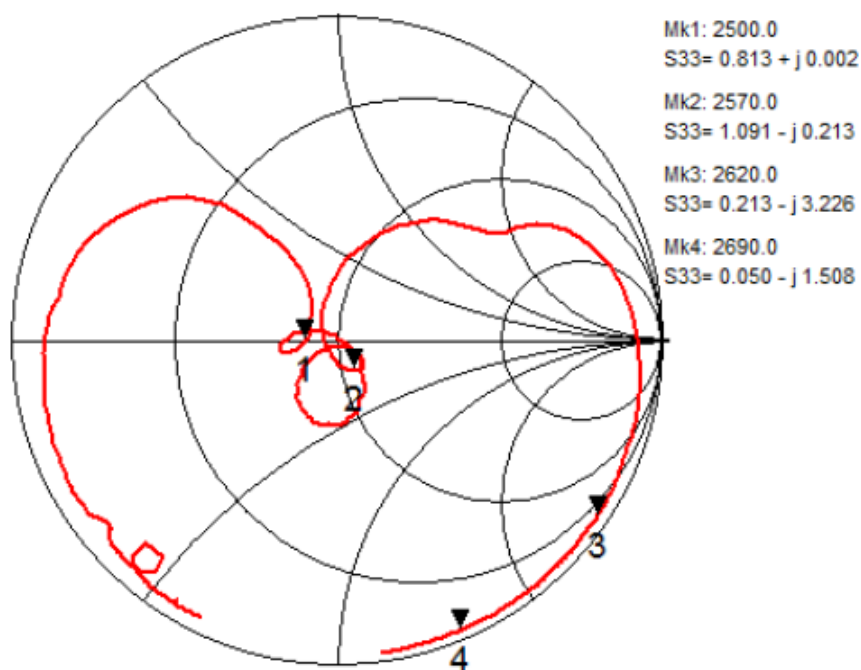
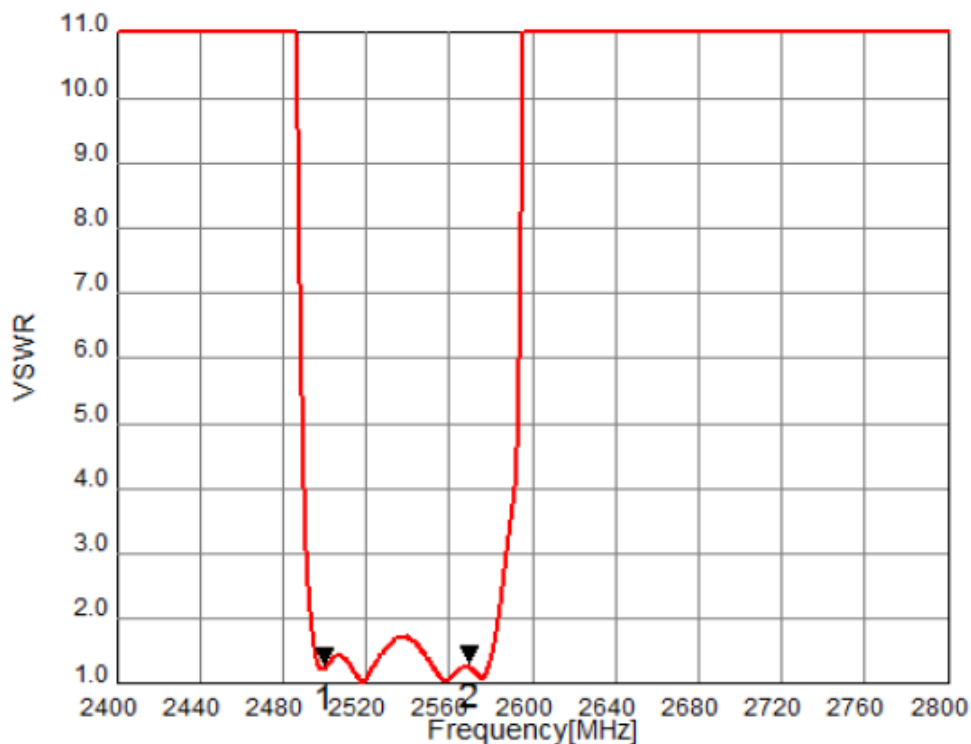
SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

Part No: MP06682

Rev. No: 1

Tx Port



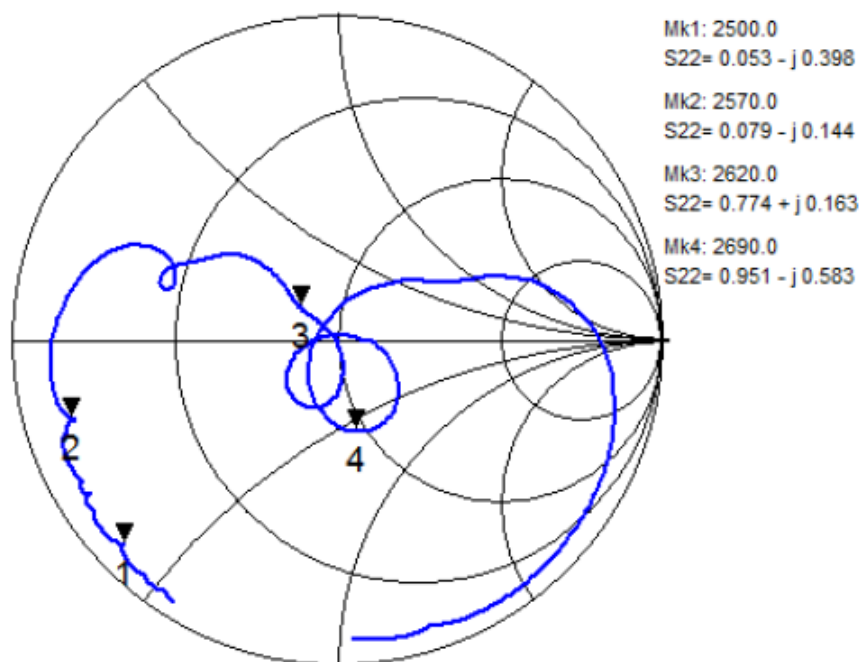
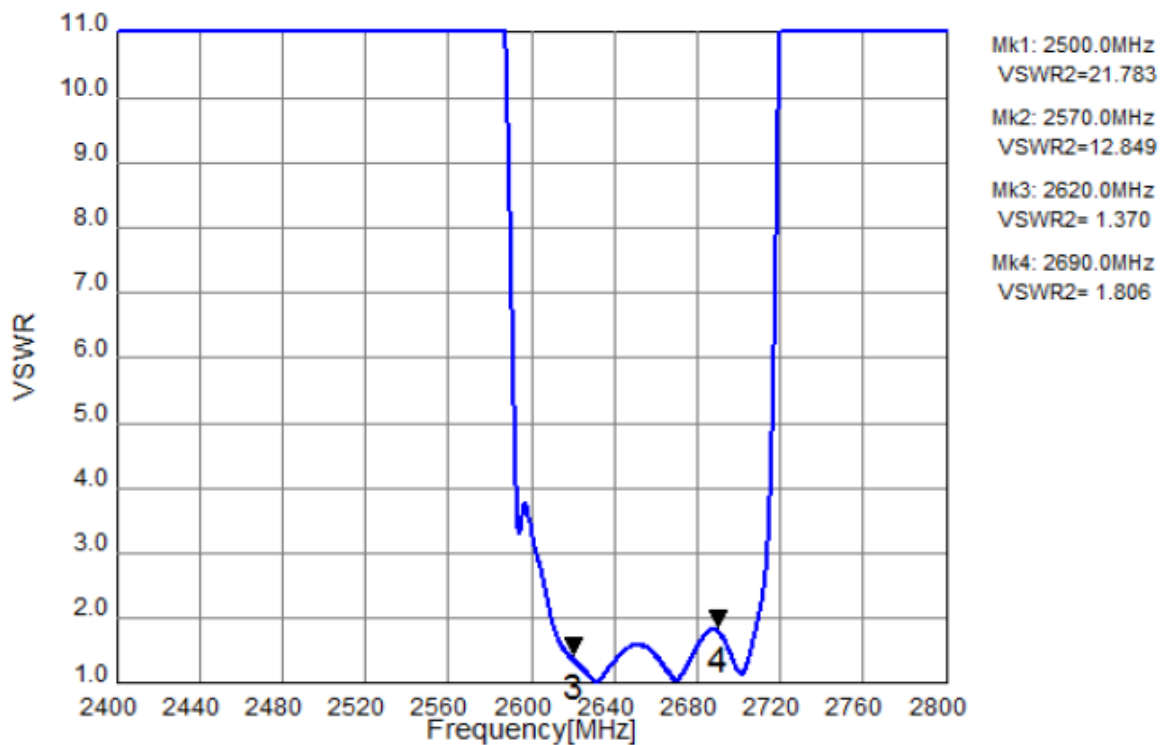
SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

Part No: MP06682

Rev. No: 1

Rx Port



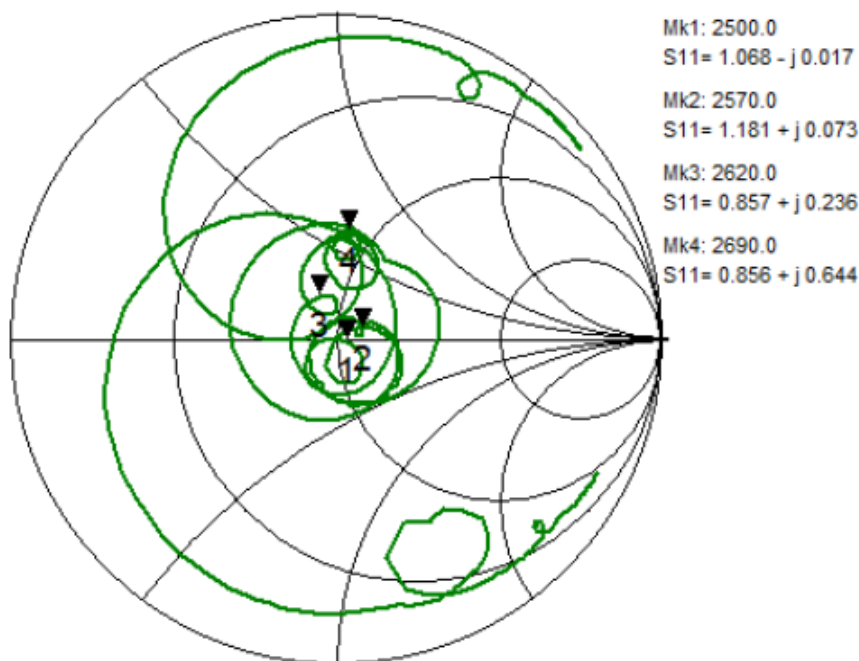
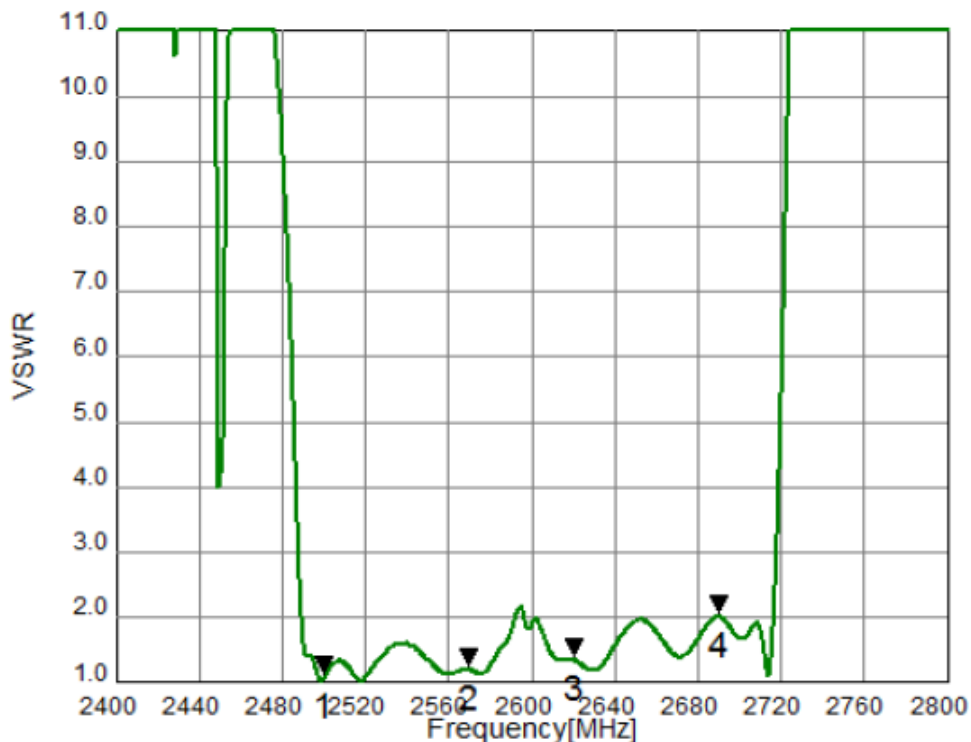
SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

Part No: MP06682

Rev. No: 1

Ant Port



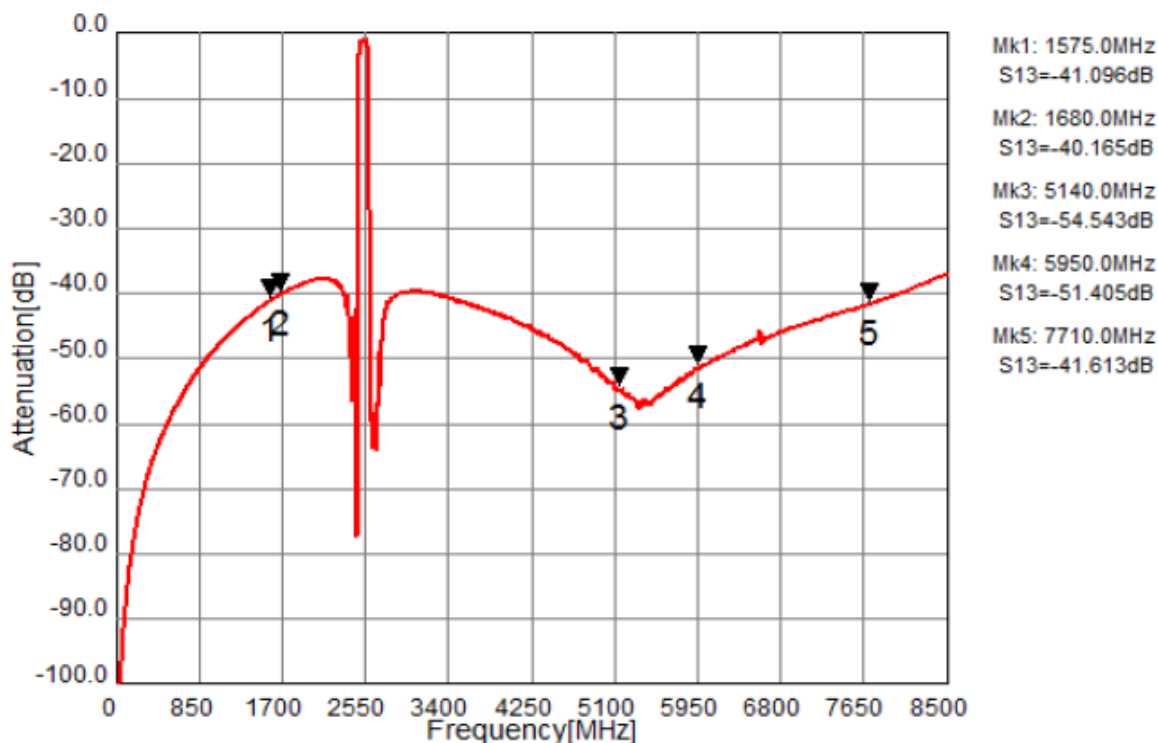
SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

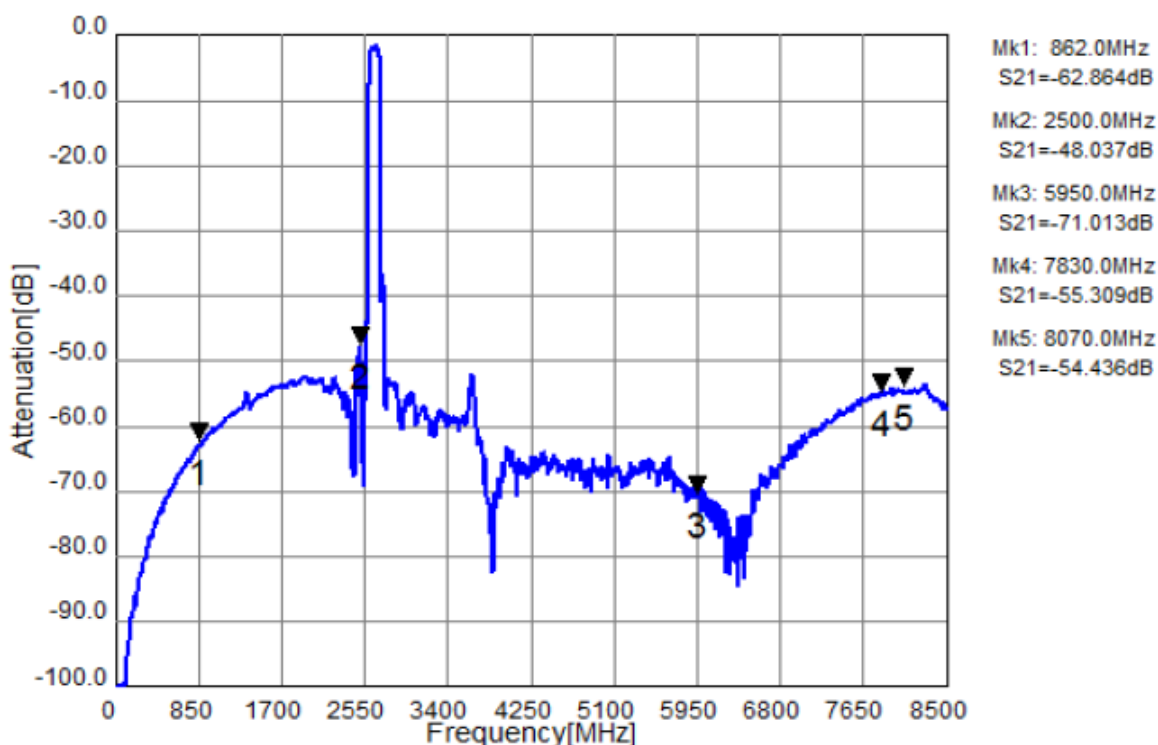
Part No: MP06682

Rev. No: 1

Tx to Ant (Wide span)



Ant to Rx (Wide span)



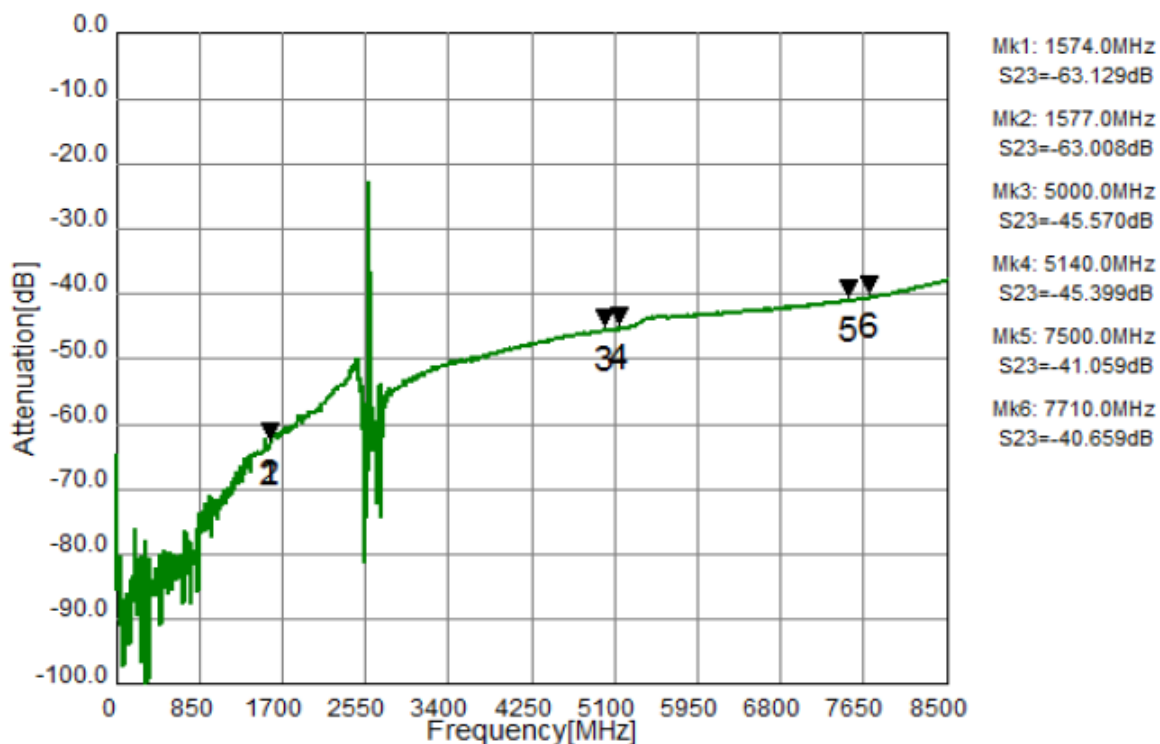
SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

Part No: MP06682

Rev. No: 1

Tx to Rx (Wide span)



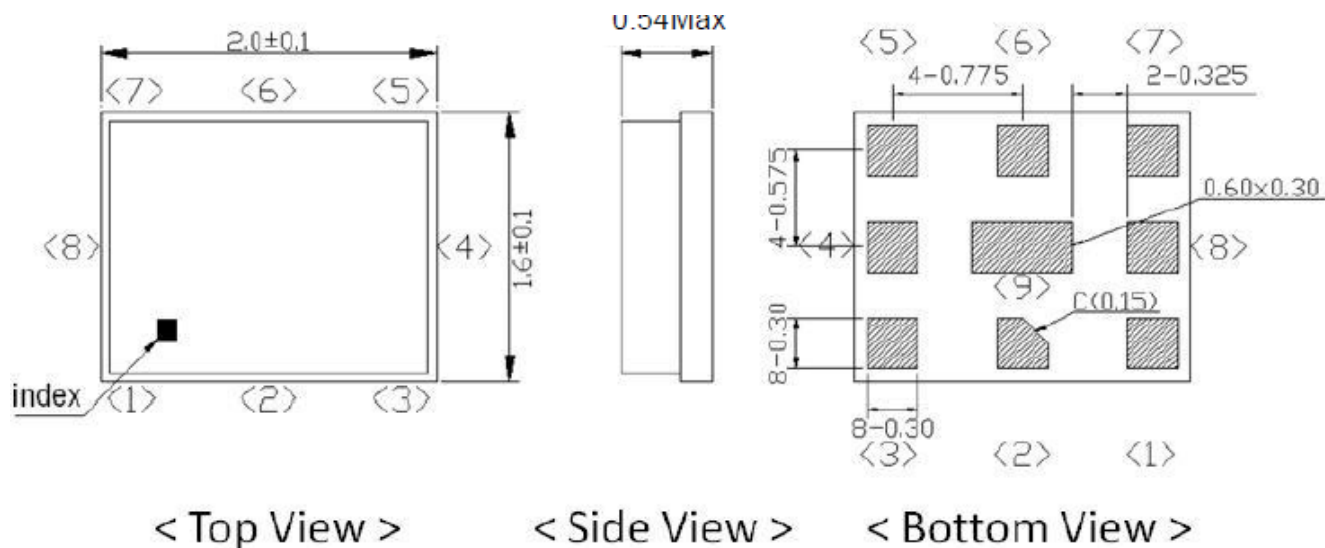
SAW Duplexer 2535.0 /2655.0MHz

Model: TF0109A

Part No: MP06682

Rev. No: 1

D. OUTLINE DRAWING:



Unit: mm

0.54mm max height: Include thickness of pads

Pin Configuration

Pin No.	Pin name	Description
1	Rx	Receiver Pin
2	GND	Ground Pin
3	Tx	Transmitter Pin
4	GND	Ground Pin
5	GND	Ground Pin
6	ANT	Antenna Pin
7	GND	Ground Pin
8	GND	Ground Pin
9	GND	Ground Pin

SAW Duplexer 2535.0 /2655.0MHz

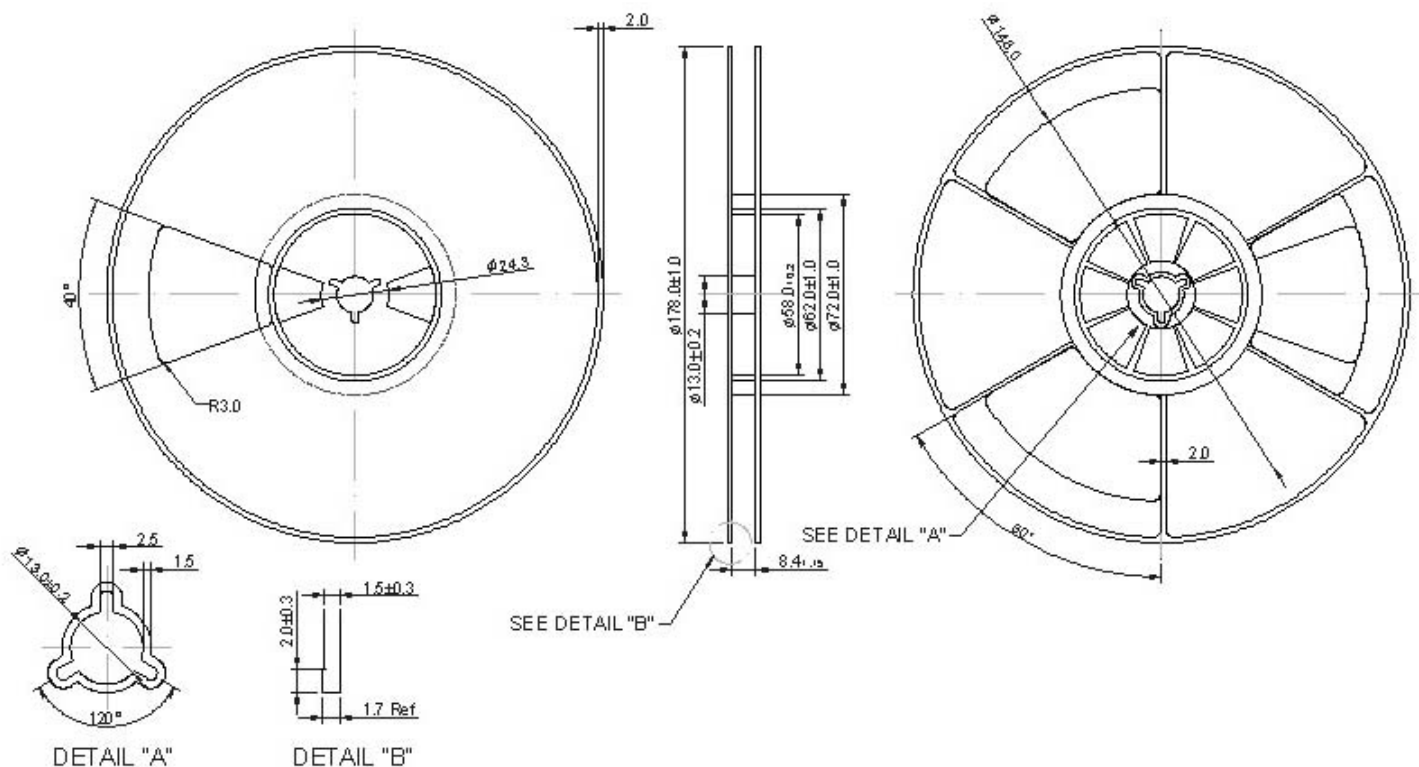
Model: TF0109A

Part No: MP06682

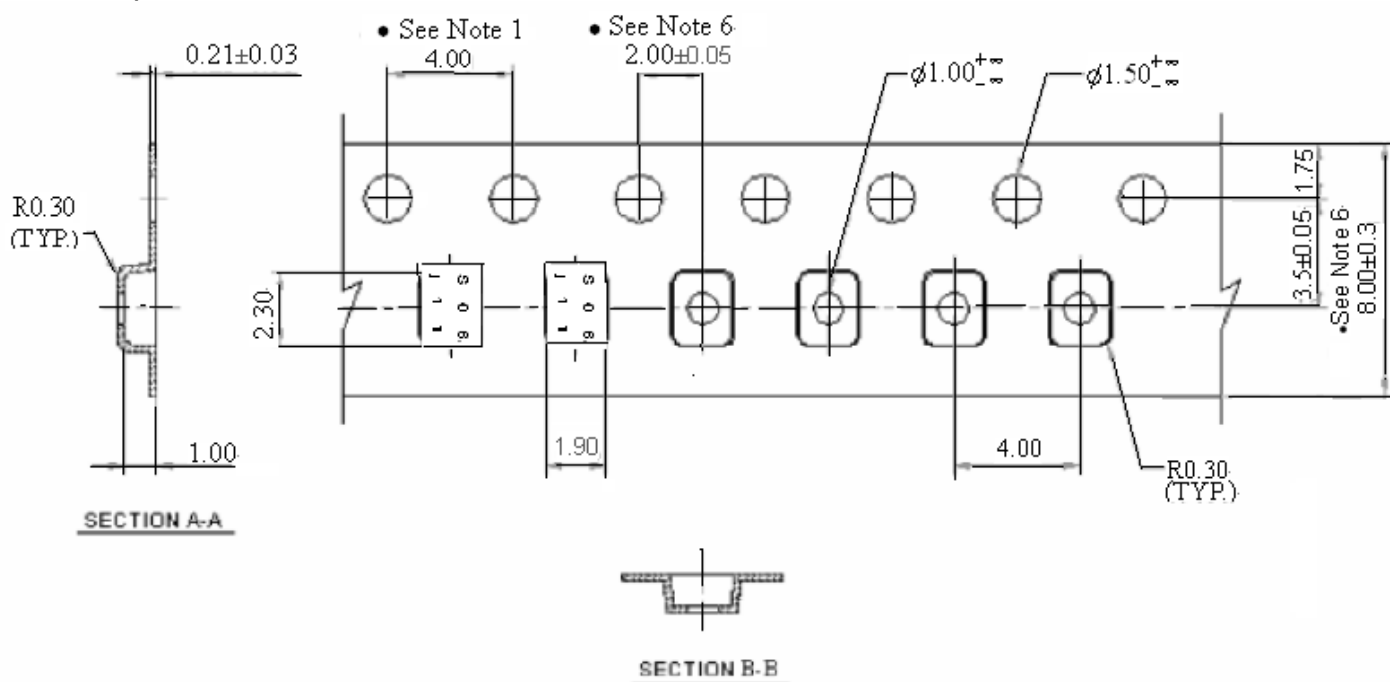
Rev. No: 1

G. PACKING:

1. Reel Dimension (Please refer to FR-75D10 for packing quantity)



2. Tape Dimension



SAW Duplexer 2535.0 /2655.0MHz
Part No: MP06682

Model: TF0109A
Rev. No: 1

H. RECOMMENDED REFLOW PROFILE:

