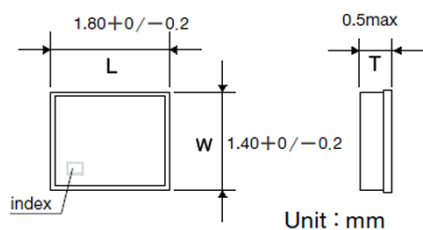


FBAR/SAW Devices (SAW Duplexers)

D6DA2G132K2D4



■ Features

- Item Summary
SAW, Duplexer, 1.8x1.4x0.5mm
Band 4 / BC15
- Lifecycle Stage
Mass Production
- Standard packaging quantity (minimum)
Taping Embossed 3000, 15000pcs

■ Products characteristics table

System	W-CDMA / CDMA / LTE
Type	SAW
Function	Duplexer
band	Band 4 / BC15
Insertion Loss (typ) (Tx-ANT/ANT-Rx)	1.5/1.7 dB
Isolation (typ)	57/55 dB
Operating Temp. Range	-20 to +85 °C
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

■ External Dimensions

Dimension L	1.8 + 0/- 0.20 mm
Dimension W	1.4 + 0/- 0.20 mm
Dimension T	Max 0.5 mm

2017.05.01

The data is reference only. Electrical characteristics vary depending on environment or measurement condition.
 TAIYO YUDEN reserves the right to make change to the Date at any time without notice.
 Before making final selection, please check product specification.



* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Table 1. Electrical Specification

Item		Condition (MHz)	Specification			Unit	Remarks	
			Min	Typ	Max			
Tx to ANT	Insertion loss	1710~1755	-	1.5	2.0	dB (*1)		
	Ripple	1710~1755	-	0.6	1.2		dB	
	VSWR	Tx ANT	1710~1755	-	1.6	2.0	-	
				-	1.6	2.0	-	
	Input power	1710~1755	+29dBm, Ta=+50°C 50kh, CW			dBm		
	Absolute attenuation	1559~1585.42	40	43	-	dB		
		2110~2155	44	52	-	dB		
2400~2500		36	42	-	dB			
3420~3510		29	35	-	dB			
5130~5265		21	28	-	dB			
ANT to Rx	Insertion loss	2110~2155	-	1.7	2.2	dB (*1)		
	Ripple	2110~2155	-	0.4	1.0		dB	
	VSWR	ANT Rx	2110~2155	-	1.5	2.0	-	
				-	1.6	2.0	-	
	Absolute attenuation	1710~1755	44	50	-	dB		
2400~2500		35	41	-	dB			
3820~3910		36	43	-	dB			
Tx to Rx	Isolation	1710~1755	52	57	-	dB		
		2110~2155	50	55	-	dB		
Terminating Impedance	Tx port	50 // 9.1nH			Ohm	Single-ended		
	Rx port	50			Ohm	Single-ended		
	Ant port	50 // 4.3nH			Ohm	Single-ended		
Operating Temperature		-20 to +85			°C			
Device size (LxWxH)		1.8 x 1.4 x 0.5			mm			

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



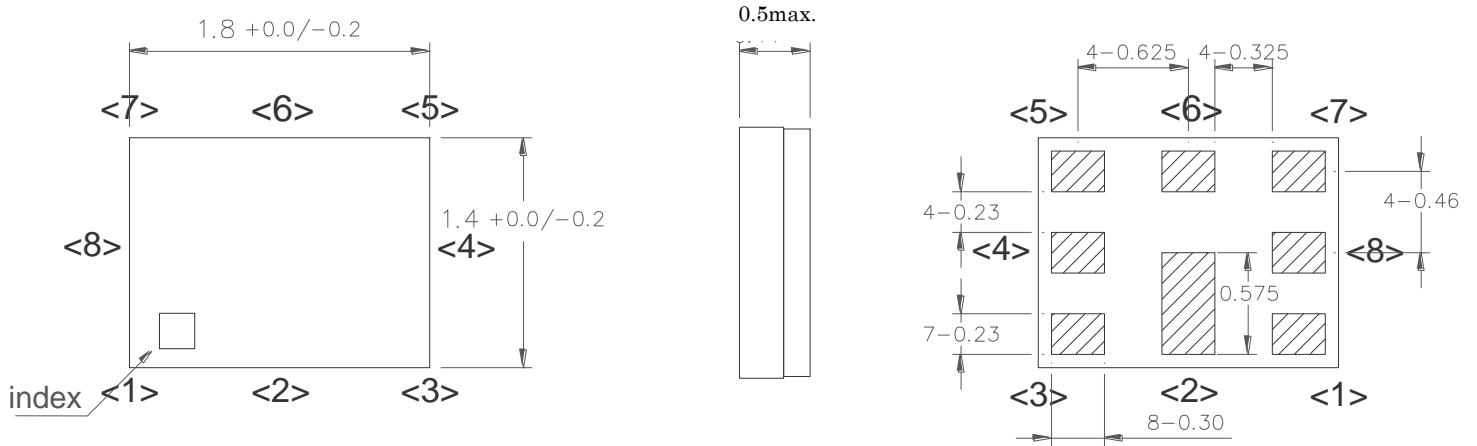
* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Dimensions



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

Figure 1. Dimensions and Pin assignment



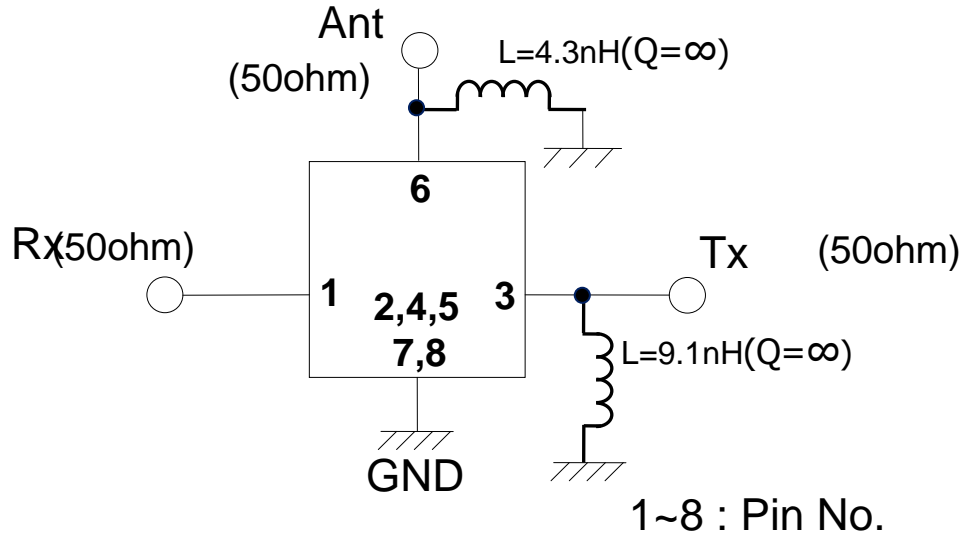
* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Evaluation Circuit



Recommended foot print pattern

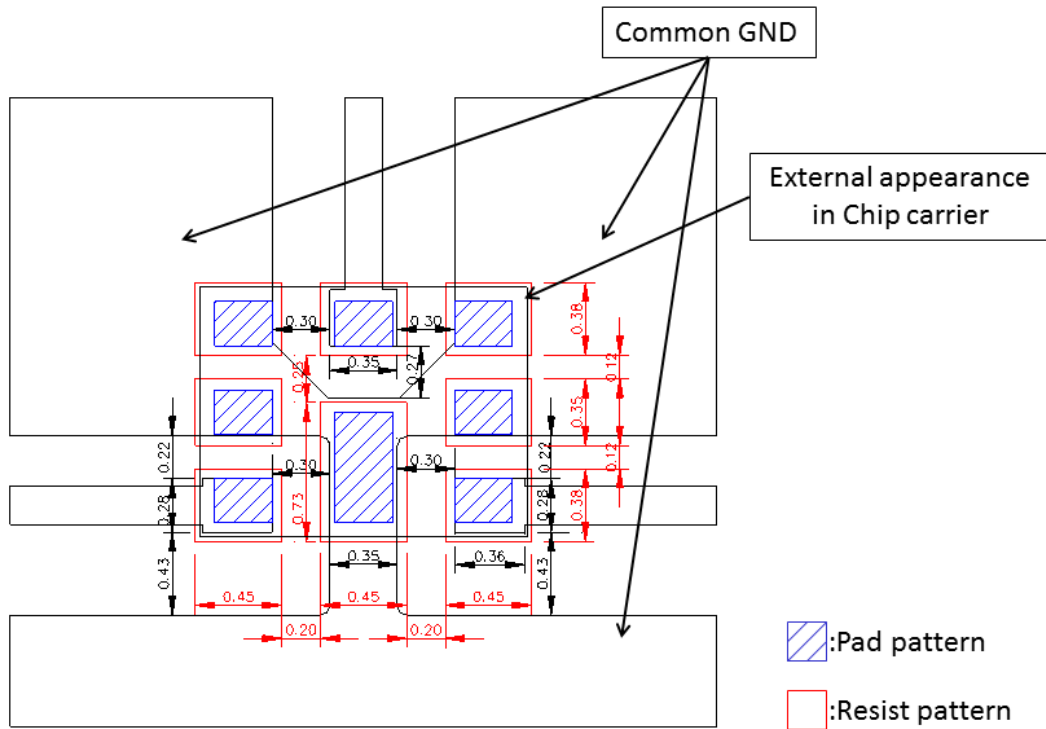


Figure 2. Recommended foot print pattern



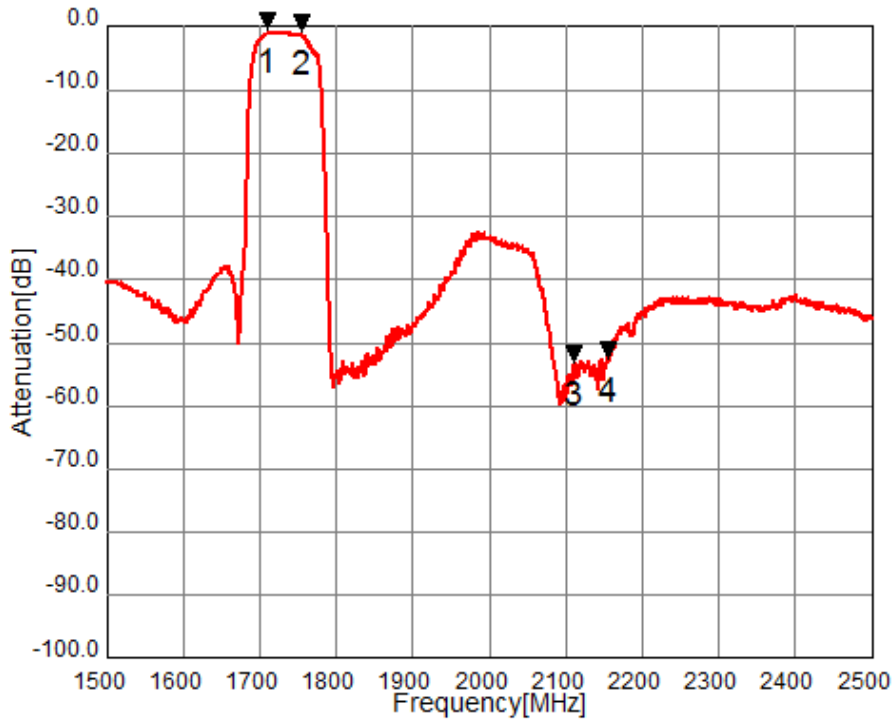
* Pb Free Part



MSL1

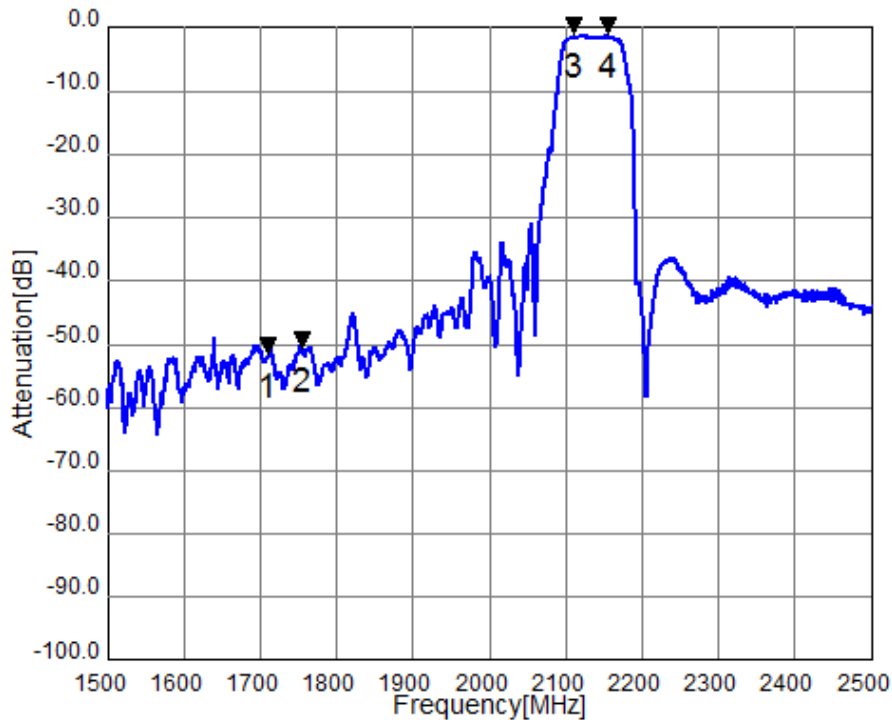
Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Tx to Ant



Mk1: 1710.0MHz
S21=-1.125dB
Mk2: 1755.0MHz
S21=-1.417dB
Mk3: 2110.0MHz
S21=-53.828dB
Mk4: 2155.0MHz
S21=-53.203dB

Ant to Rx



Mk1: 1710.0MHz
S31=-52.129dB
Mk2: 1755.0MHz
S31=-51.251dB
Mk3: 2110.0MHz
S31=-1.611dB
Mk4: 2155.0MHz
S31=-1.528dB

Figure 3-1. Electrical Characteristics

These data **exclude** loss that comes from the test board.



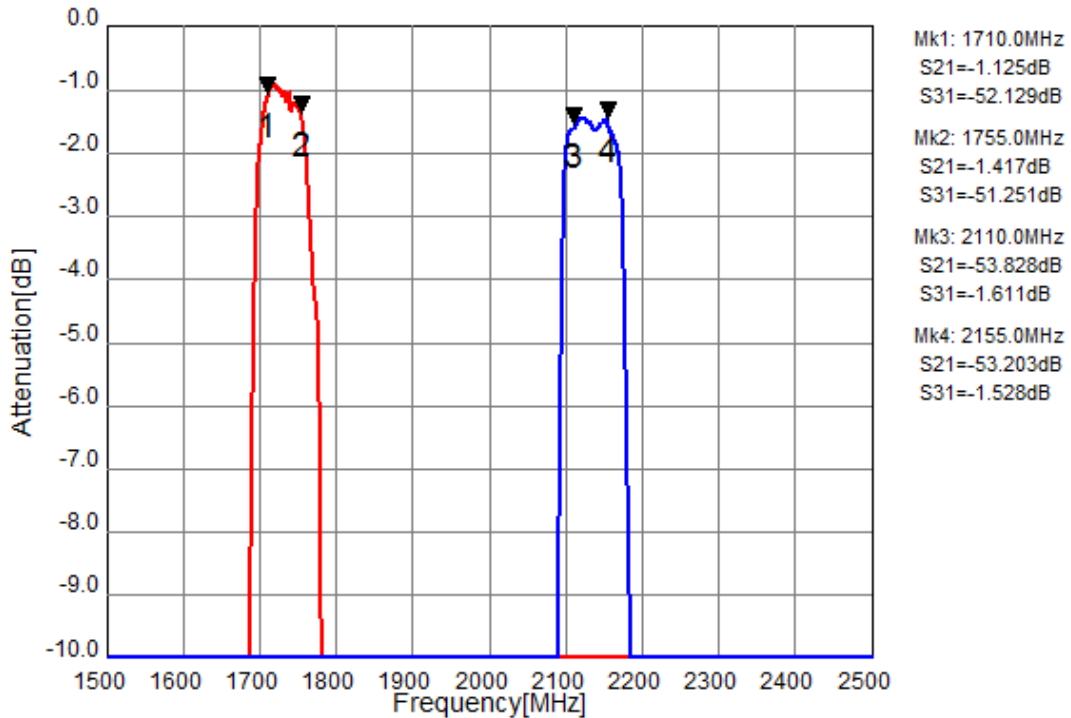
* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Tx to Ant, Ant to Rx



Tx to Rx Isolation

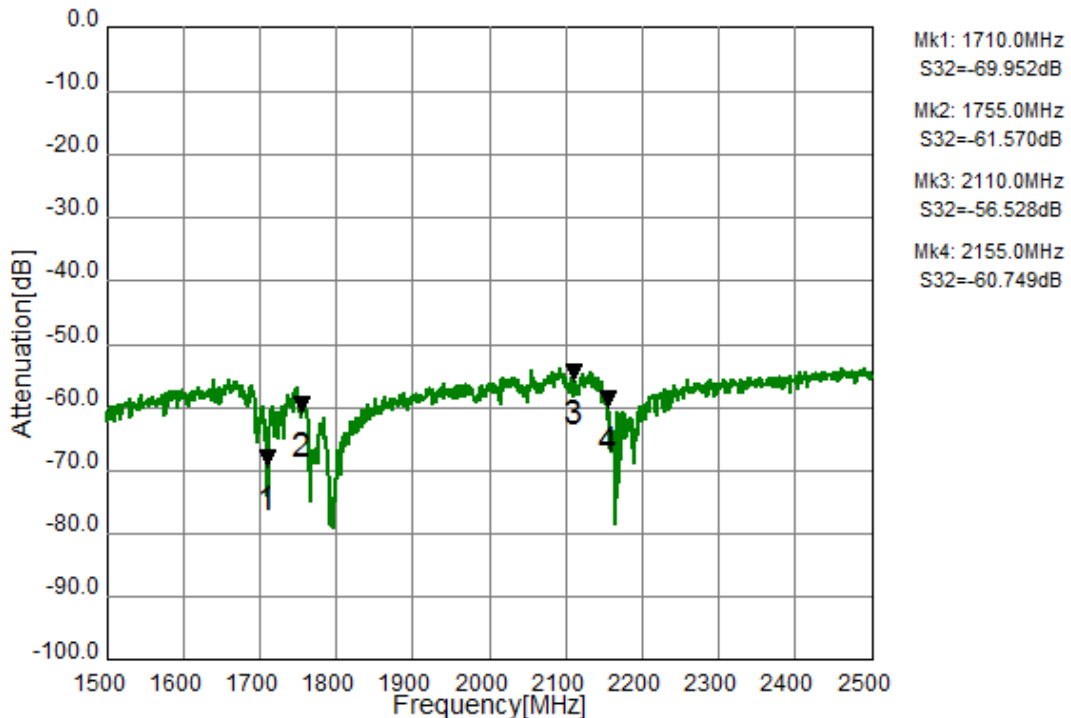


Figure 3-2. Electrical Characteristics

These data **exclude** loss that comes from the test board.



* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Tx Port

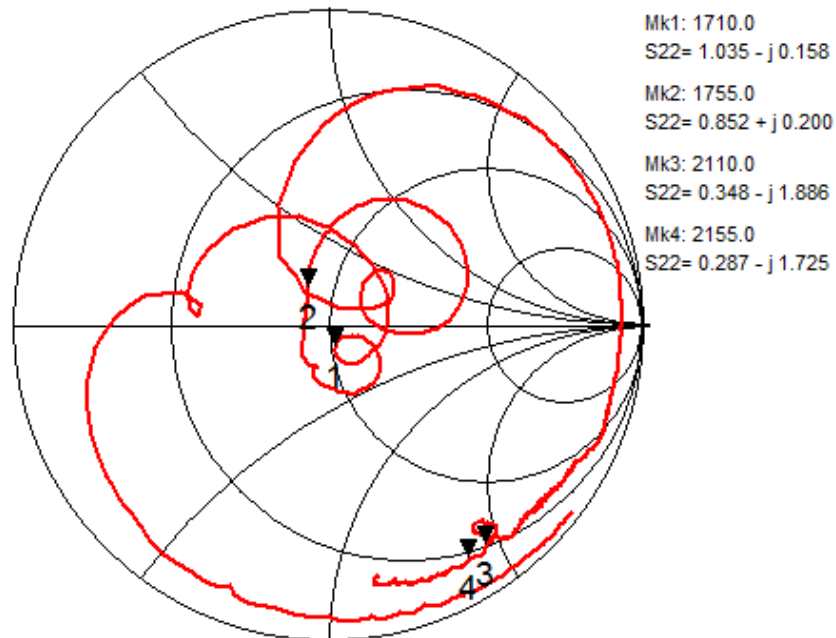
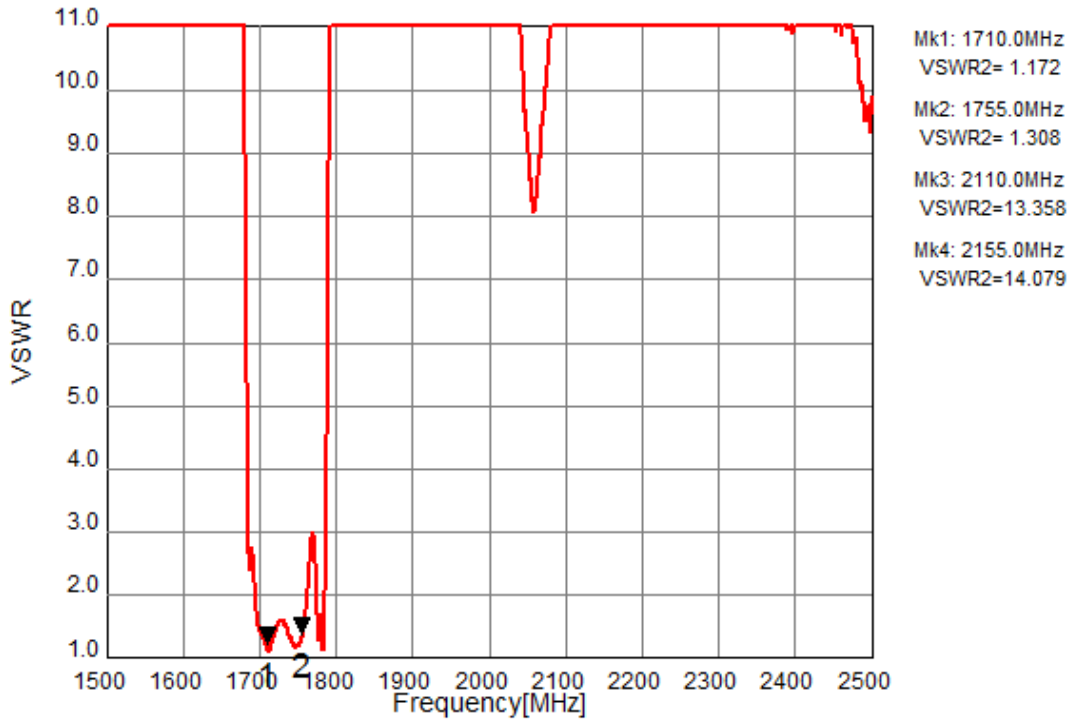


Figure 3-3. Electrical Characteristics



* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Rx Port

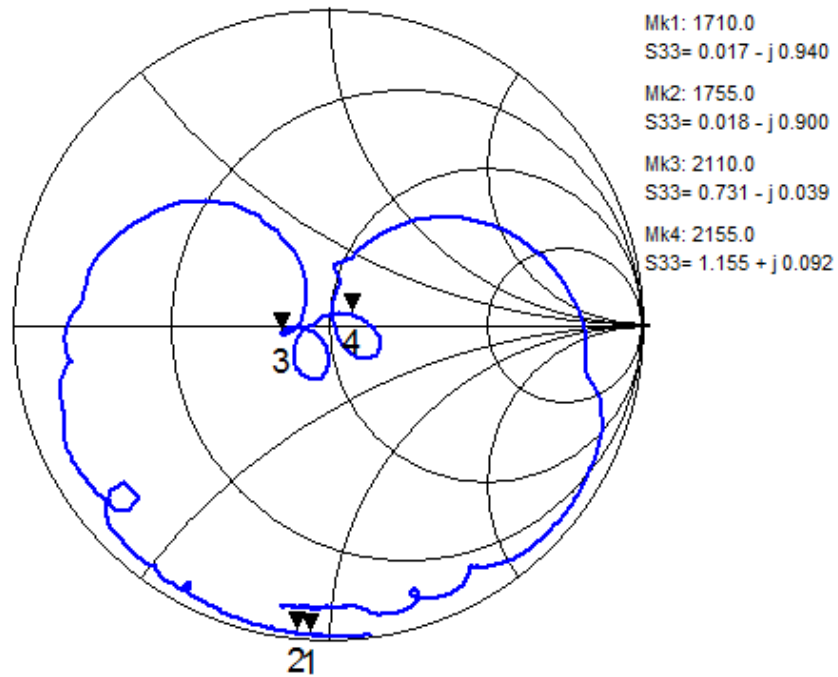
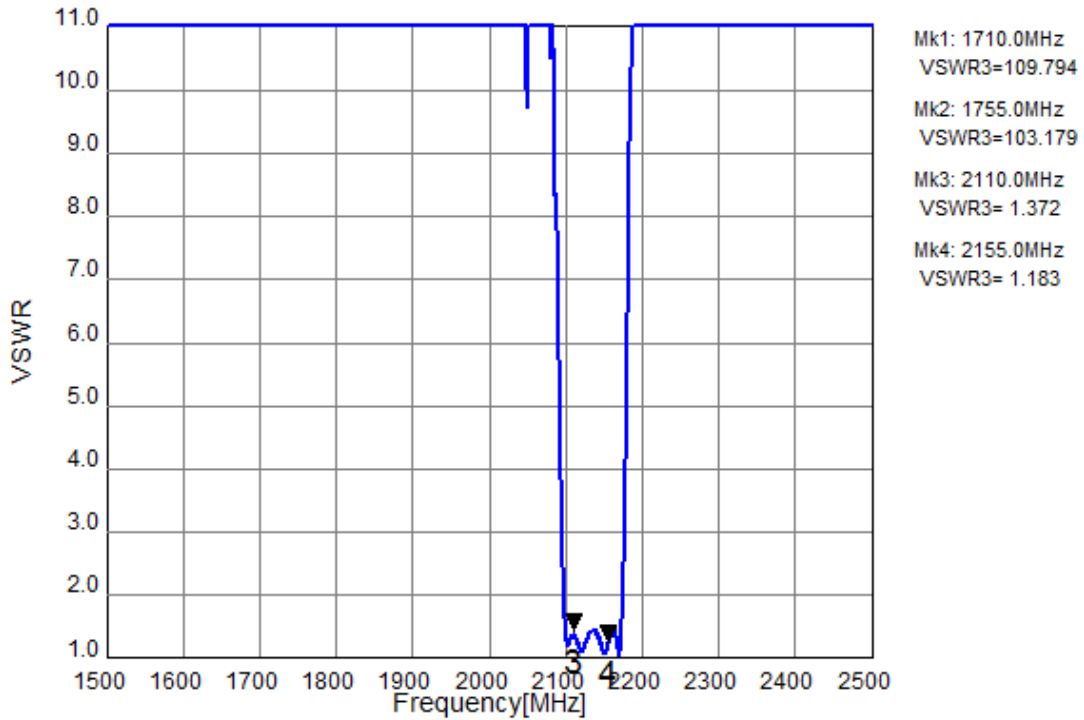


Figure 3-4. Electrical Characteristics



* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Ant Port

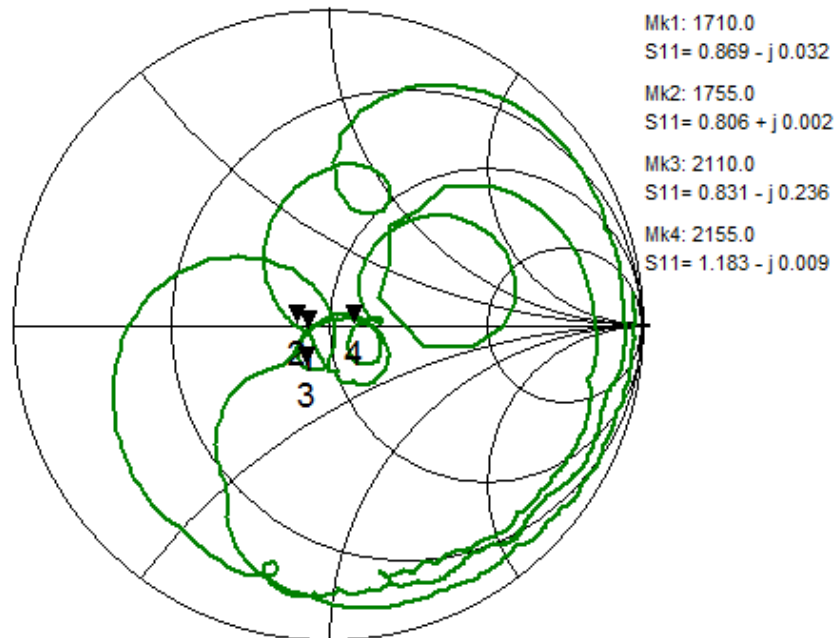
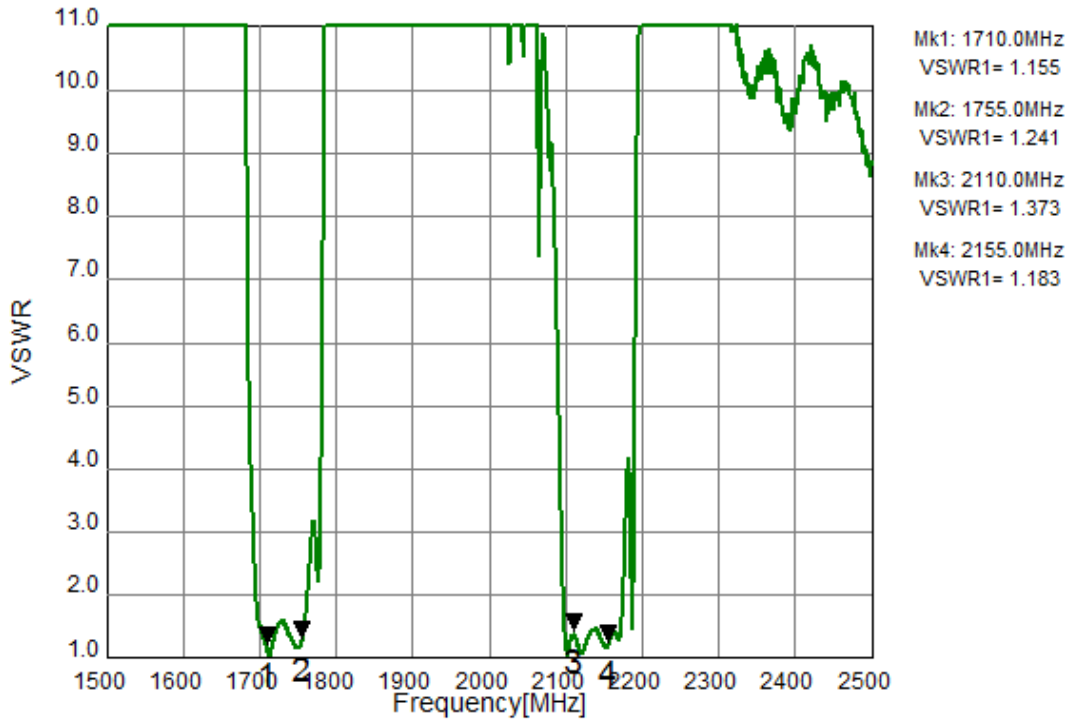


Figure 3-5. Electrical Characteristics



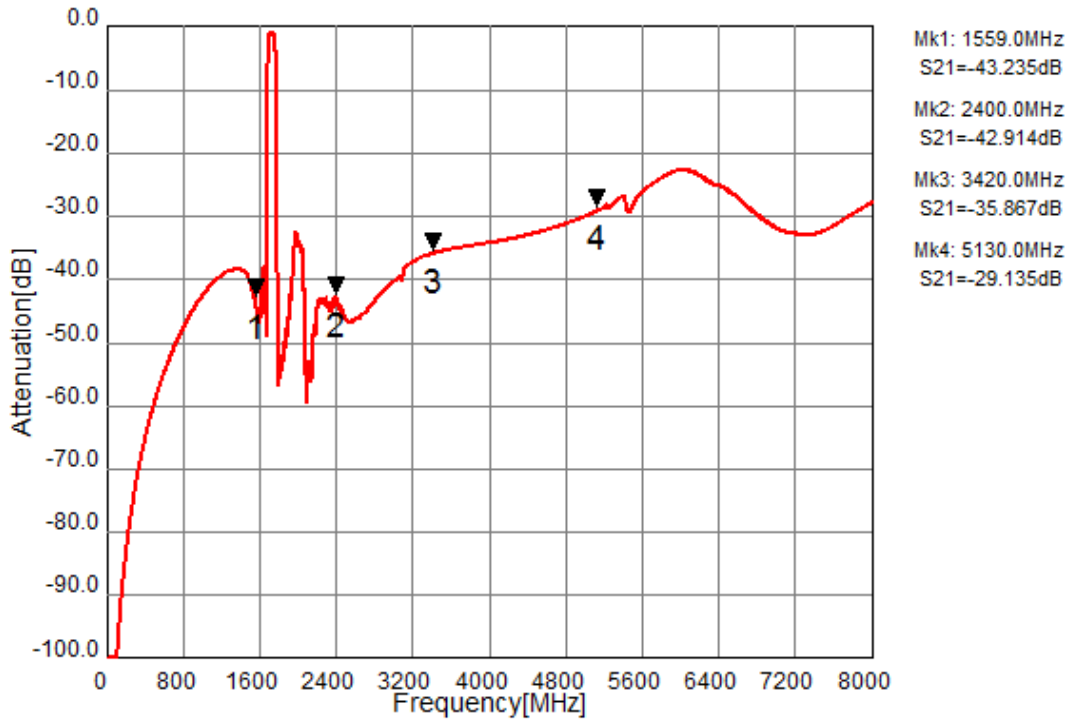
* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Tx to Ant (Wide span)



Ant to Rx (Wide span)

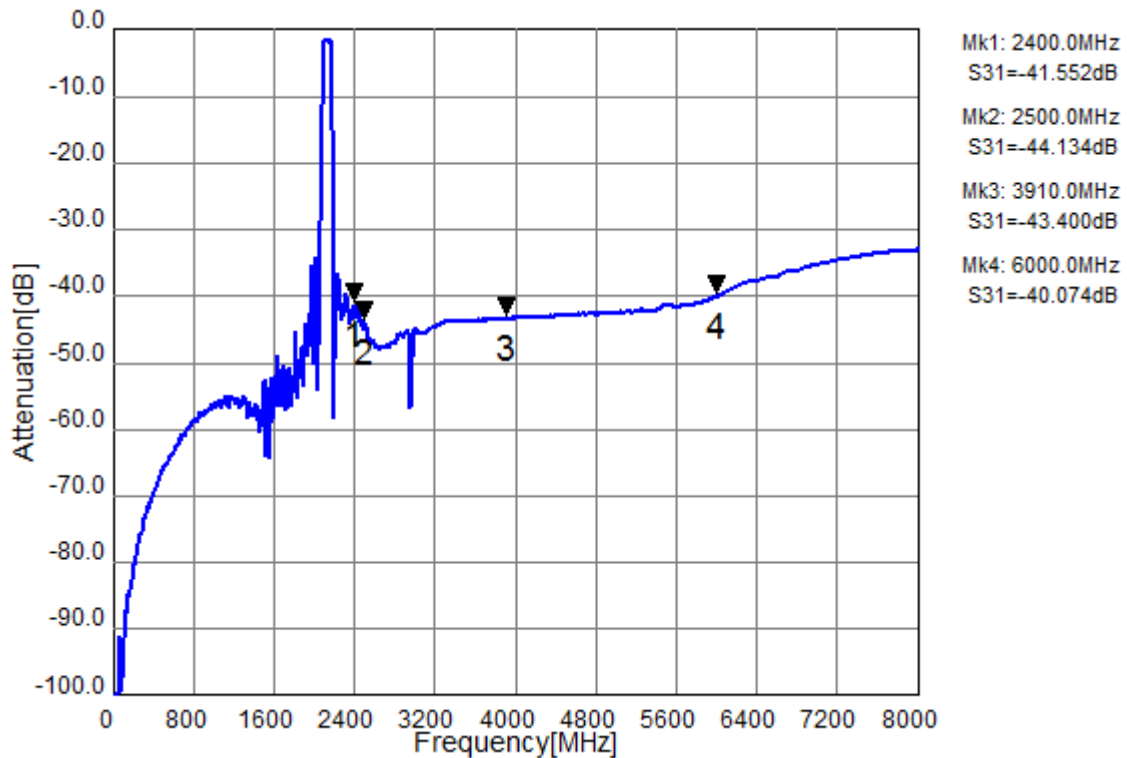


Figure 3-6. Electrical Characteristics



* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 4 Duplexer	Date	Mar. 6, 2015
Part Number	D6DA2G132K2D4	Ver.2.0efE	Final

Ordering Code

Ordering Code	Packing	Reel size	Status
D6DA2G132K2D4- Z	Tape & Reel	3,000 pcs.	MP
D6DA2G132K2D4- ZA	Tape & Reel	less than 3,000 pcs.	MP
D6DA2G132K2D4- Y	Tape & Reel	15,000 pcs.	MP
D6DA2G132K2D4- YA	Tape & Reel	less than 15,000 pcs.	MP
D6DA2G132K2D4- Q	Bulk	few pcs.	MP

*Minimum order quantity (MOQ) is assigned for each inquiry, Please contact to Sales Representatives.

*MP : Mass Production

Notice

All of the contents specified herein are subject to change without notice due to technical improvements, etc.

Please contact Taiyo Yuden Co., Ltd. for further details of product specifications.

Please conduct validation and verification of products in actual condition of mounting and operating environment before commercial shipment of the equipment.

This product is for general electronics equipment such as Audio-Visual equipment, household electronics, office supplies, information services and telecommunications; therefore, in case this product is used for any medical equipment, space equipment, nuclear equipment or disaster prevention equipment, please contact Taiyo Yuden in advance.

In case this product is used for general electronics equipment or circuits which require high safety and high reliability, thoroughly evaluate on safety and add a protection circuit if necessary.