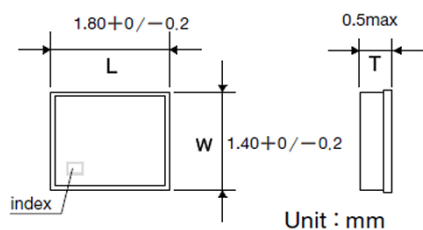


FBAR/SAW Devices (SAW Duplexers)

D5DA942M5K2G6



■ Features

- Item Summary
SAW, Duplexer, 1.8x1.4x0.5mm
Band 8
- Lifecycle Stage
Mass Production
- Standard packaging quantity (minimum)
Taping Embossed 3000 , 15000pcs

■ Products characteristics table

System	W-CDMA / LTE
Type	SAW
Function	Duplexer
band	Band 8
Insertion Loss (typ) (Tx-ANT/ANT-Rx)	1.7/1.8 dB
Isolation (typ)	58/59 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



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Table 1. Electrical Specification

Item		Condition (MHz)	Specification			Unit	Remarks	
			Min	Typ	Max			
Tx to ANT	Insertion loss	882.4~912.6	-	1.7	2.5(*2)	dB (*1)		
		880.24~914.76	-	2.1	3.4	dB (*1)		
	Ripple	880~915	-	1.3	2.9	dB		
	Input Power	882.4~912.6	+29dBm, Ta=+50°C, 10000h, WCDMA modulation			-		
	VSWR	Tx	880~915	-	1.6	2.2	-	
		Ant	880~915	-	1.5	2.2	-	
	Absolute Attenuation		927.4~957.6	48(*2)	60	-	dB	
			1573.3~1605.9	40	46	-	dB	
1760~1830			40	47	-	dB		
2640~2745			28	35	-	dB		
ANT to Rx	Insertion loss	927.4~957.6	-	1.8	2.5(*2)	dB (*1)		
		925~960	-	2.0	3.1	dB (*1)		
	Ripple	925~960	-	0.9	2.3	dB		
	VSWR	Ant	925~960	-	1.8	2.3	-	
		Rx	925~960	-	1.7	2.2	-	
	Absolute Attenuation		882.4~912.6	50(*2)	57	-	dB	
2400~2500			40	51	-	dB		
Tx to Rx	Isolation	882.4~912.6	55(*2)	58	-	dB		
			55(*2)	59	-	dB	0 to +85°C	
		927.4~957.6	53(*2)	-	-	dB	-10 to 0°C	
			50(*2)	-	-	dB	-20 to -10°C	
Terminating Impedance	Tx port	50 // 33nH			Ohm	Single-ended		
	Rx port	50			Ohm	Single-ended		
	Ant port	50 // 8.2nH			Ohm	Single-ended		
Operating Temperature		-20 to +85			°C			
Device size (L max. x W max. x H max.)		1.8 x 1.4 x 0.5			mm			

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

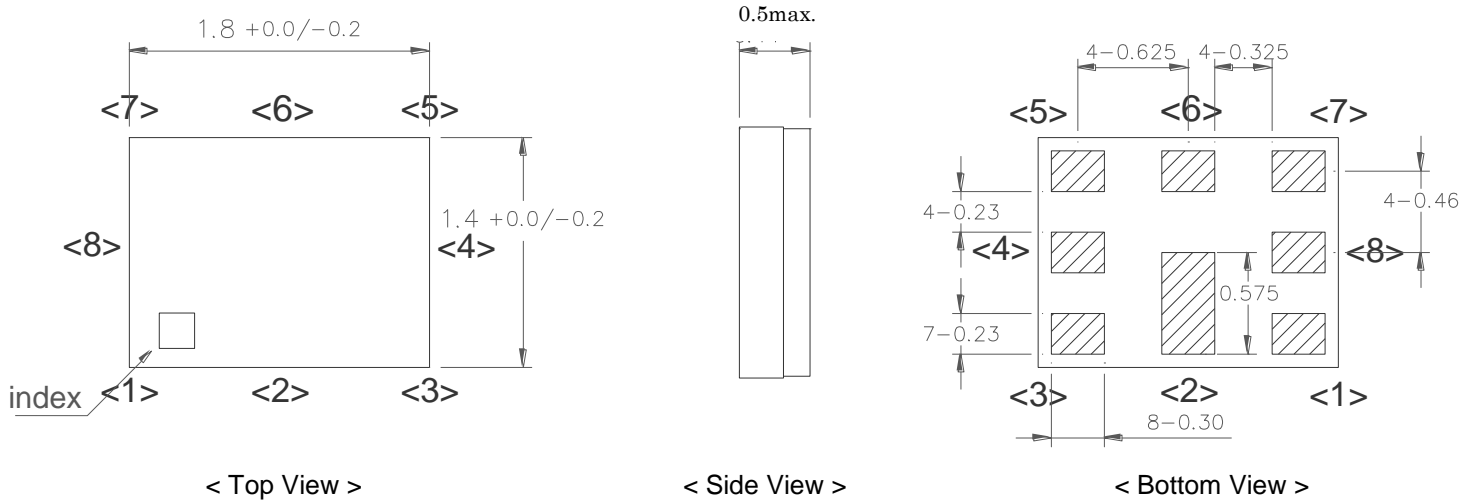
(*2) Integrated over +/-1.92MHz around the WCDMA channel center frequency



* Pb Free Part

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Dimensions



Unit: mm

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

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Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Evaluation Circuit

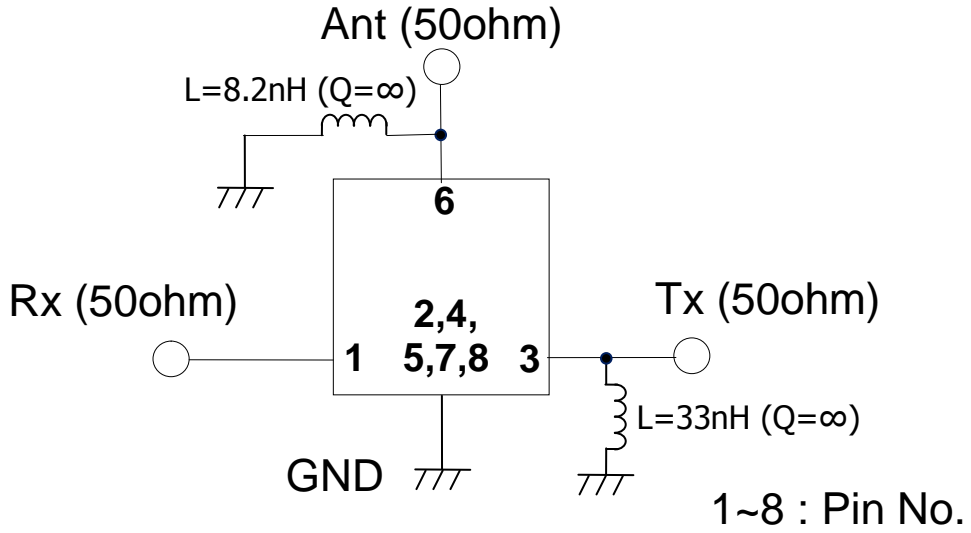


Figure 2. Evaluation Circuit

Recommended foot print pattern

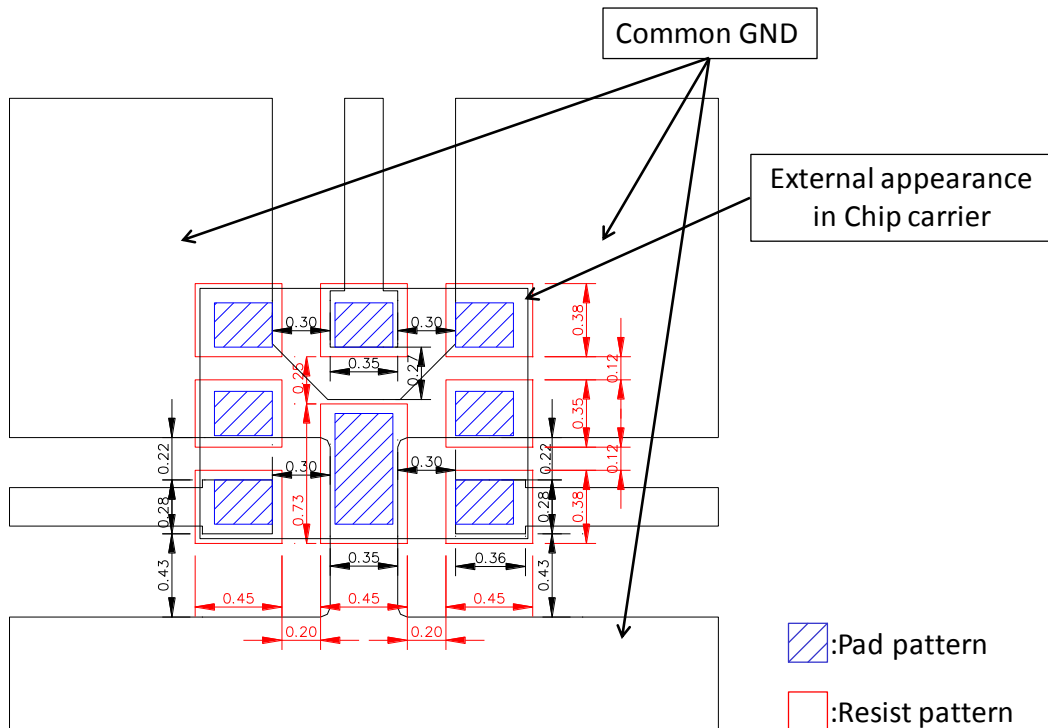


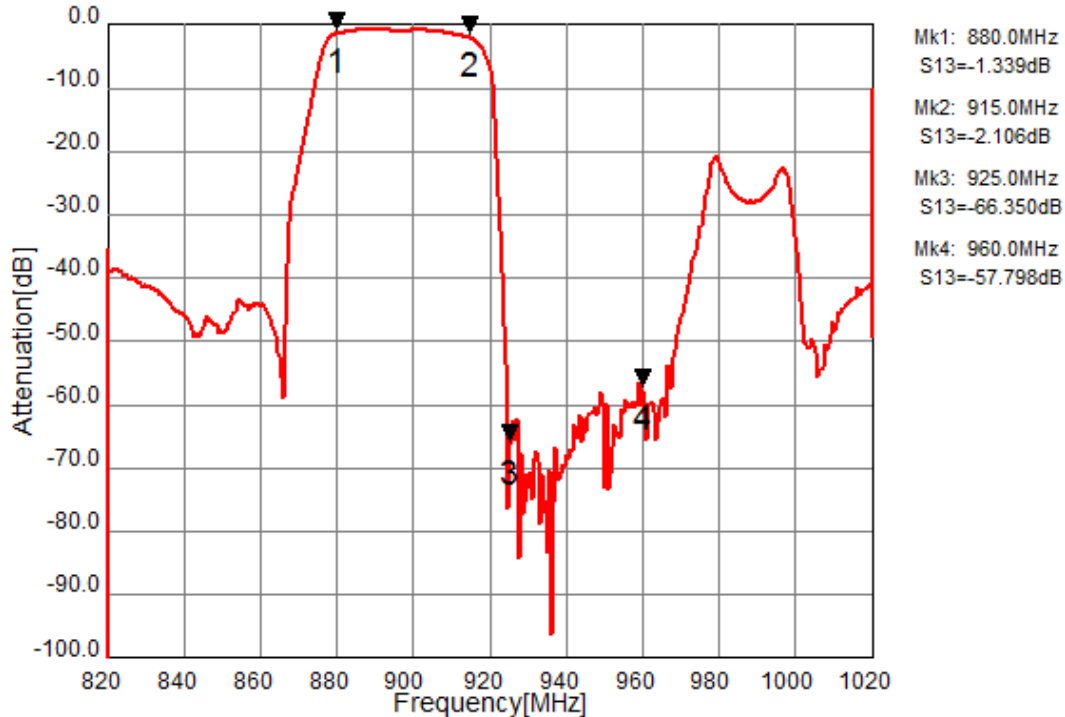
Figure 3. Recommended foot print pattern



* Pb Free Part

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System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Tx to Ant



Ant to Rx

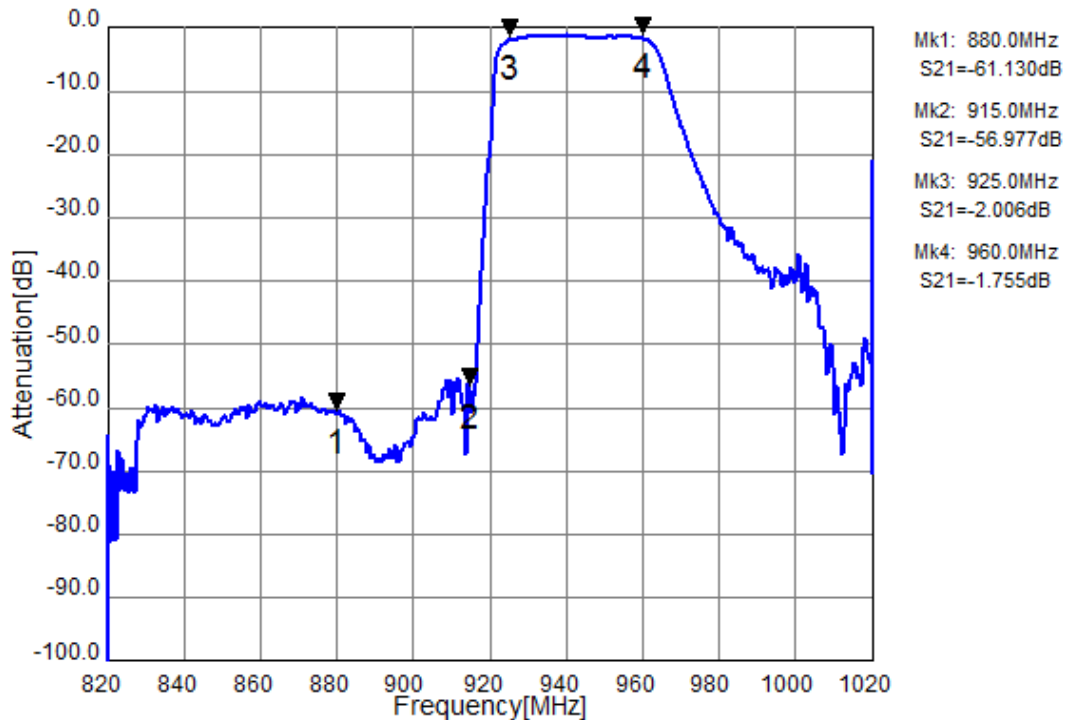


Figure 4-1. Electrical Characteristics

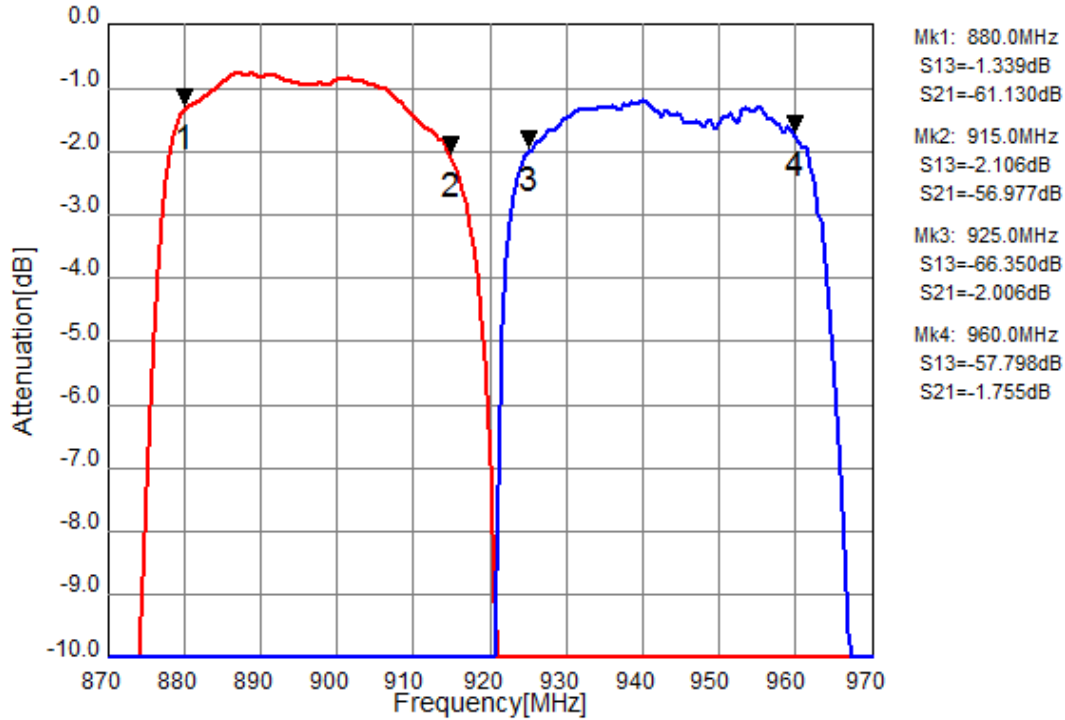
These data **exclude** loss that comes from the test board.



* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Tx to Ant, Ant to Rx



Tx to Rx Isolation

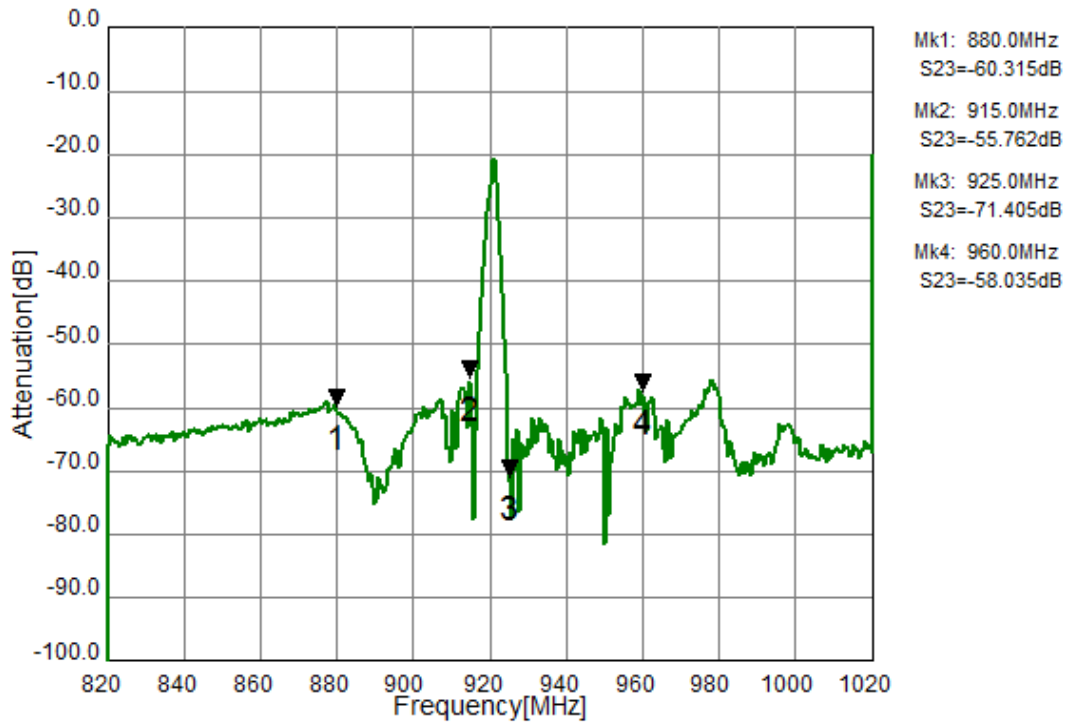


Figure 4-2. Electrical Characteristics

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



* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Tx Port

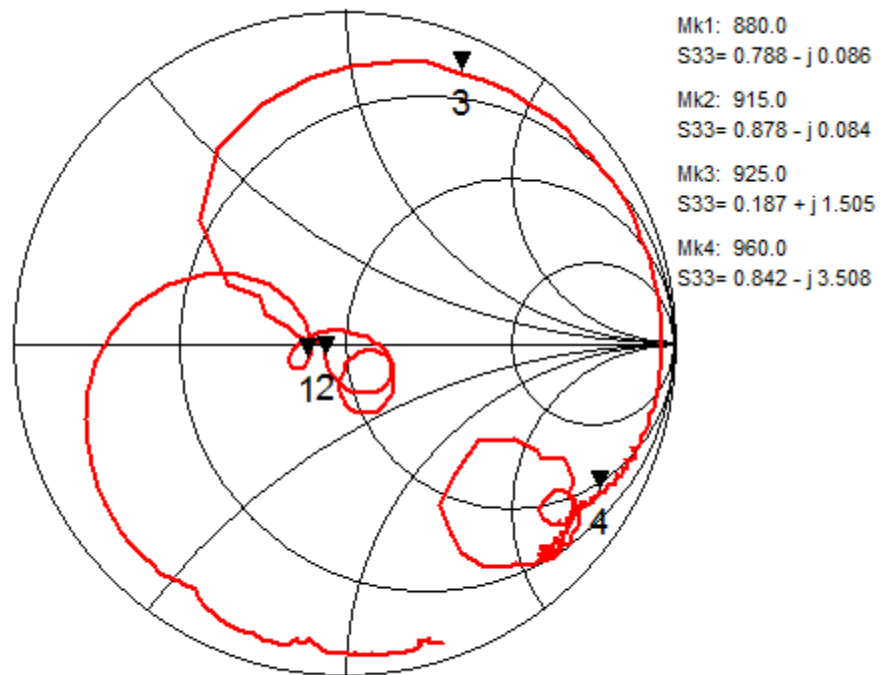
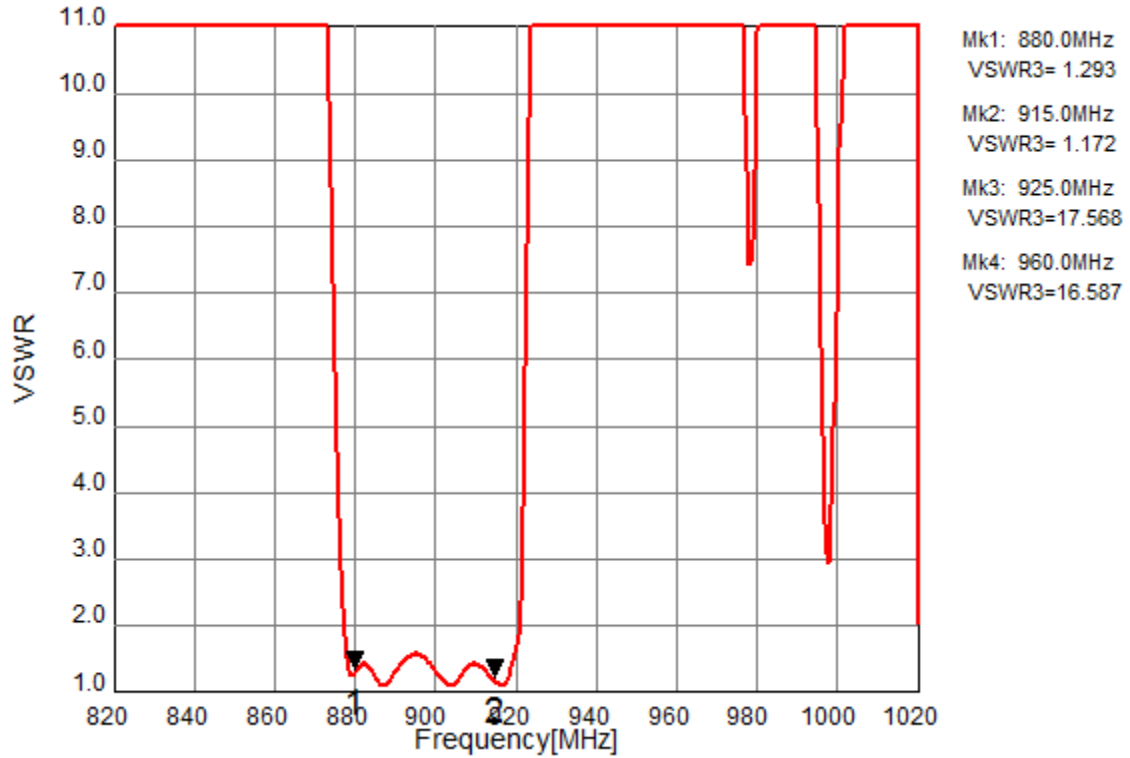


Figure 4-3. Electrical Characteristics



* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Rx Port

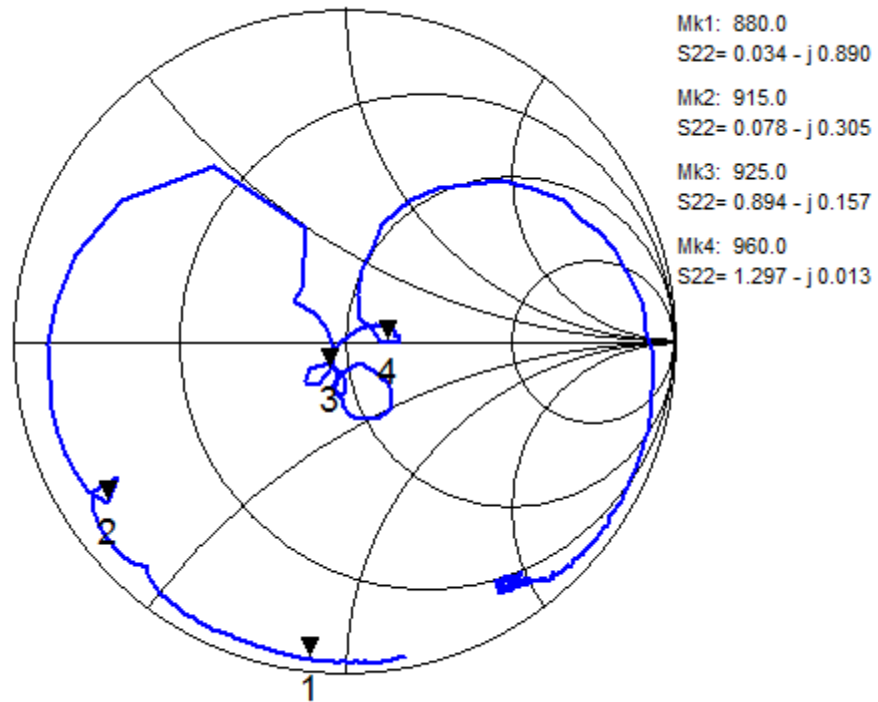
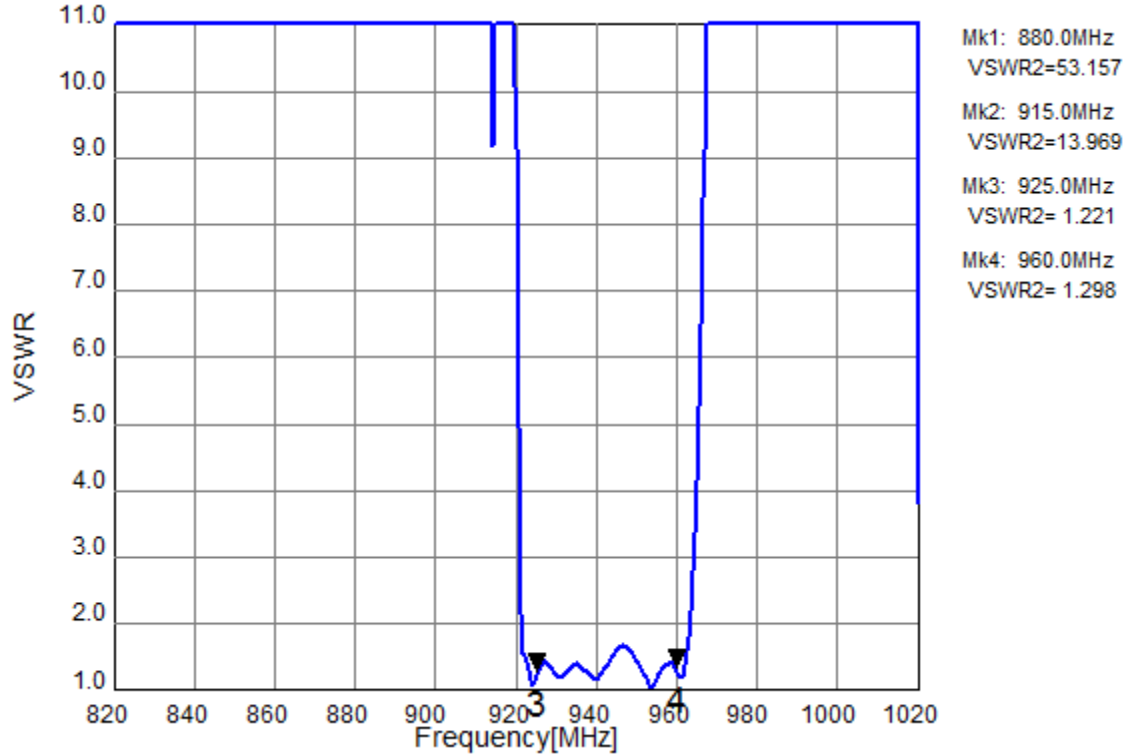


Figure 4-4. Electrical Characteristics



* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Ant Port

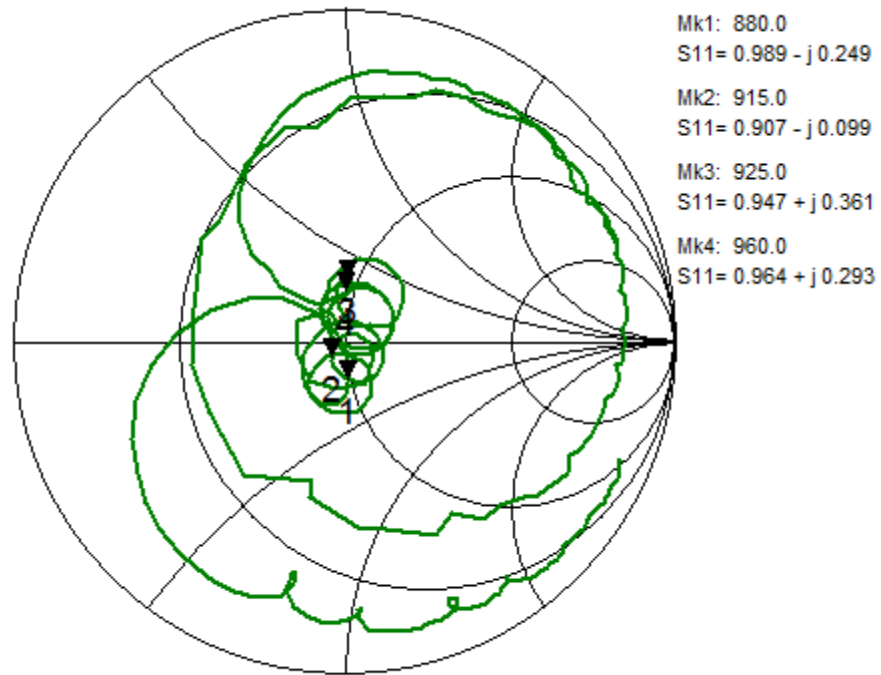
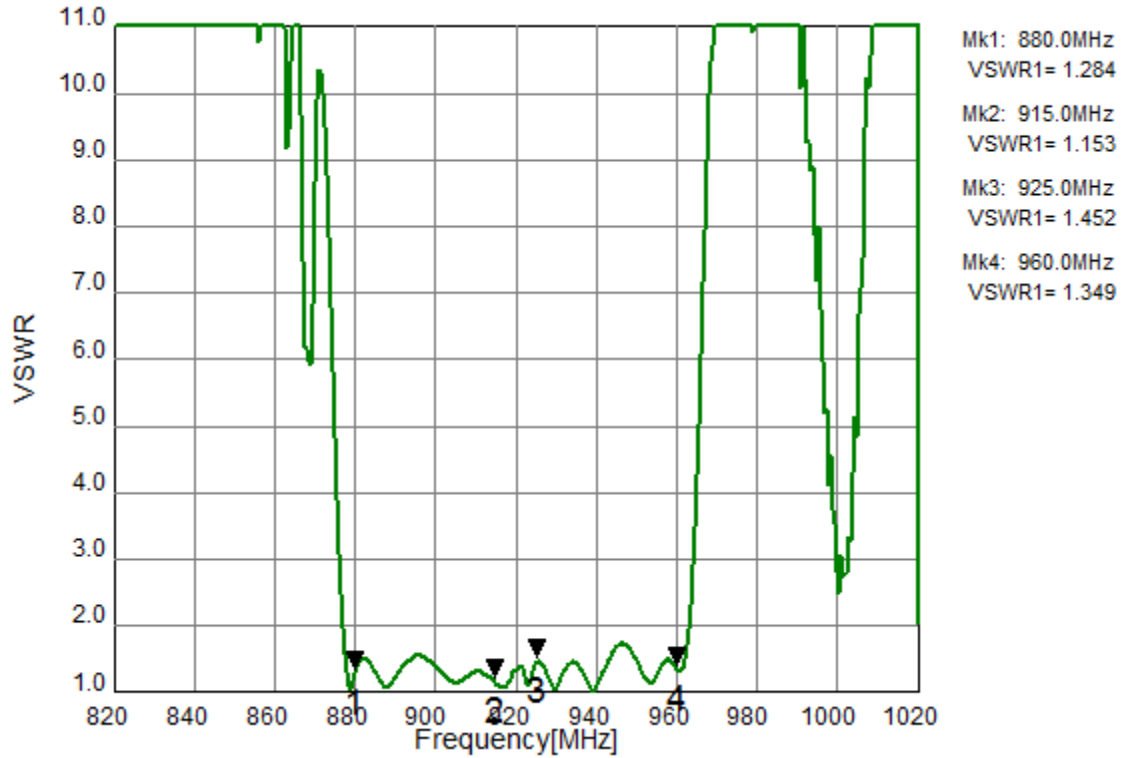


Figure 4-5. Electrical Characteristics



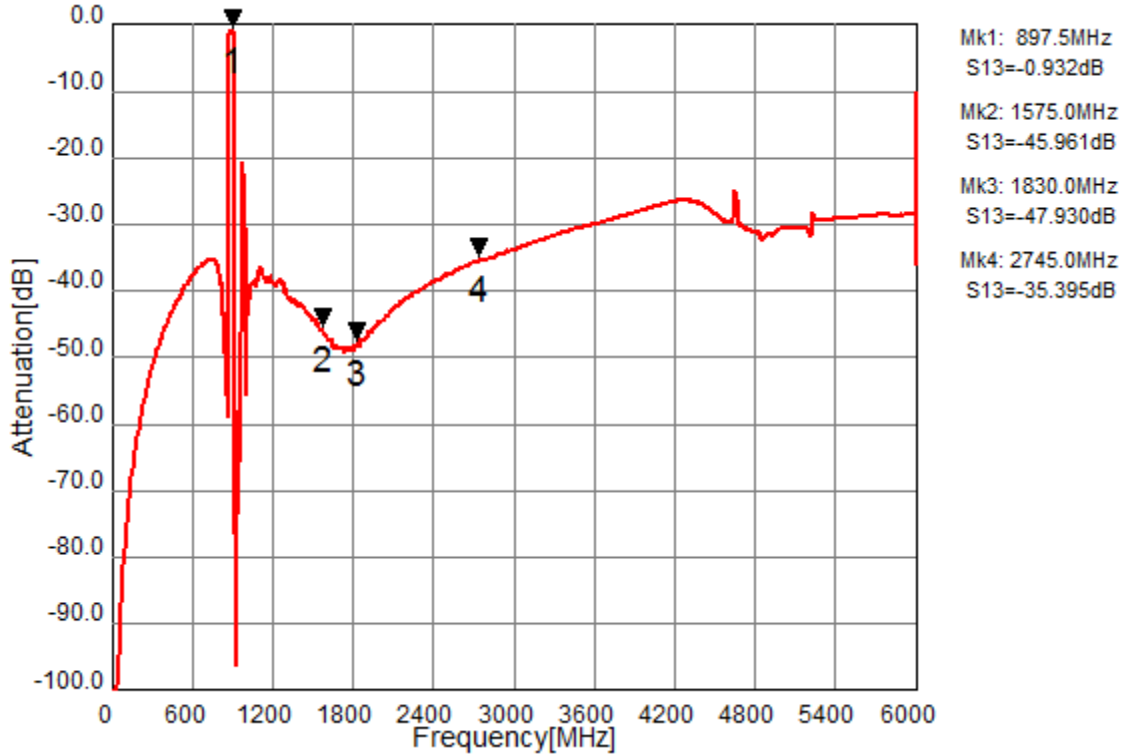
* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Tx to Ant (Wide span)



Ant to Rx (Wide span)

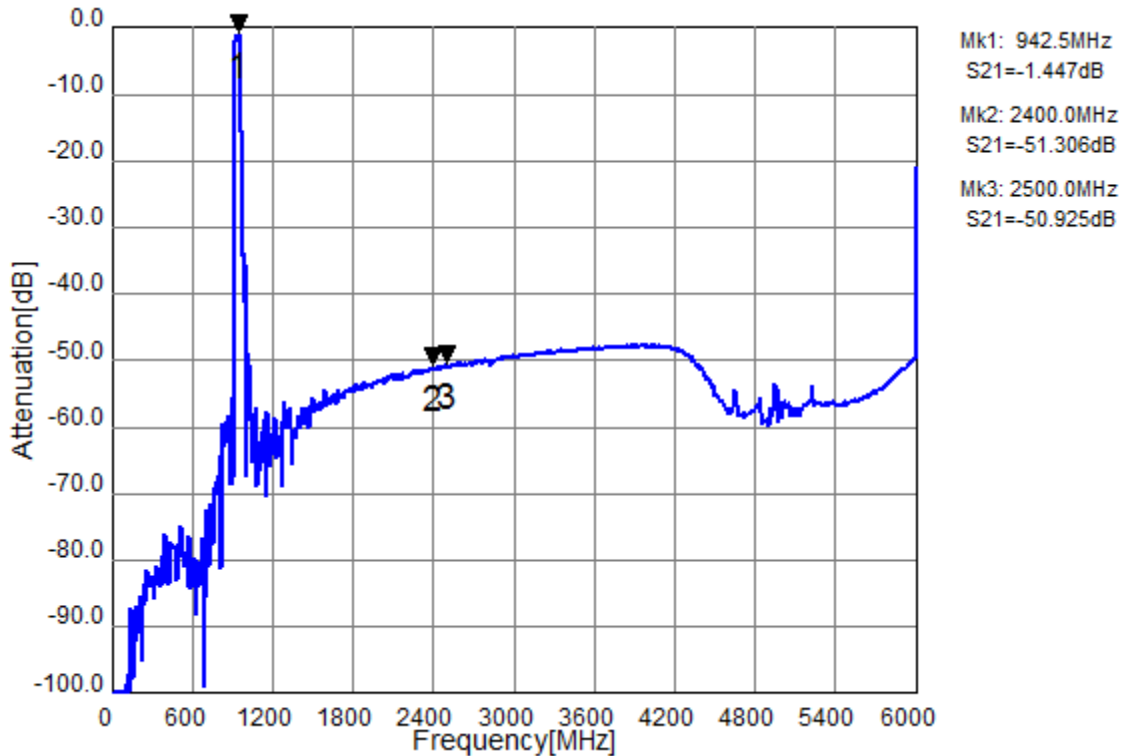


Figure 4-6. Electrical Characteristics



* Pb Free Part



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band 8 Duplexer	DATE	Mar. 6, 2015
Part Number	D5DA942M5K2G6	Version 2.1bbD	Final

Ordering Code

Ordering Code	Packing	Reel size	Status
D5DA942M5K2G6-Z	Tape & Reel	3,000 pcs.	MP
D5DA942M5K2G6-ZA	Tape & Reel	less than 3,000 pcs.	MP
D5DA942M5K2G6-Y	Tape & Reel	15,000 pcs.	MP
D5DA942M5K2G6-YA	Tape & Reel	less than 15,000 pcs.	MP
D5DA942M5K2G6-Q	Bulk	few pcs.	MP

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

*MP : Mass production

Notice

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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.