



\* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.		
System	Band 11 Duplexer	Date	Mar. 07, 2018	
Part Number	D6DA1G485K2W1	Version	2.2cbC	Final

**Table 1-1. Electrical Specification**

Item		Condition (MHz)	Specification			Unit	Remarks
			Min.	Typ.	Max.		
Tx to Ant	Insertion loss (*1)	1427.9 - 1447.9	-	1.2	1.8	dB	
	Ripple	1427.9 - 1447.9	-	0.3	1.0	dB	
	VSWR	Tx	1427.9 - 1447.9	-	1.4	2.0	-
		Ant	1427.9 - 1447.9	-	1.4	2.0	-
	Input Power		+29 dBm, CW, +50 °C, 10000h			-	
			+29 dBm, LTE 5 MHz 1RB, +50 °C, 10000h			-	
			+30 dBm, CW, +50 °C, 5000h			-	
			+30 dBm, LTE 5 MHz 1RB, +50 °C, 5000h			-	
Ant to Rx	Absolute attenuation	1475.9 - 1495.9	46	59	-	dB	
		1559 - 1606	38	48	-	dB	
		2400 - 2500	38	43	-	dB	
		2855.8 - 2895.9	33	38	-	dB	
		4283.7 - 4343.7	20	30	-	dB	
	Absolute attenuation	1475.9 - 1495.9	-	1.3	1.8	dB	
		1475.9 - 1495.9	-	0.3	1.0	dB	
		VSWR	Tx	1475.9 - 1495.9	-	1.4	2.0
			Rx	1475.9 - 1495.9	-	1.4	2.0
		1427.9 - 1447.9	52	57	-	dB	
		2400 - 2500	38	44	-	dB	
		2951.8 - 2991.8	40	46	-	dB	
		4427.7 - 4487.7	45	53	-	dB	
	Isolation	1427.9 - 1447.9	55	58	-	dB	
		1475.9 - 1495.9	55	60	-	dB	



MSL1

\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.		
System	Band 11 Duplexer	Date	Mar. 07, 2018	
Part Number	D6DA1G485K2W1	Version	2.2cbC	Final

**Table 1-2. Electrical Specification**

Item	Condition (MHz)	Specification			Unit	Remarks
		Min.	Typ.	Max.		
Terminating Impedance	Tx port	50		Ω		
	Rx port	50		Ω		
	Ant port	50//8.5nH		Ω		
Operating Temperature		-30 to +85		°C		
Maximum DC in all ports		-	-	5	VDC	Device only
DC impedance to ground		100		MΩ		Device only
Device size (L max. x W max. x H max.)		1.8 x 1.4 x 0.44		mm		

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

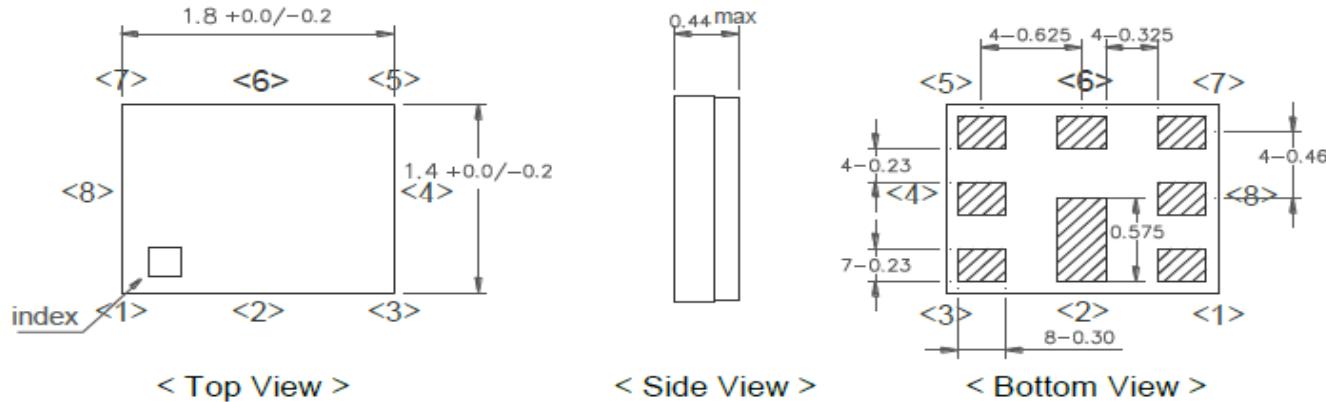


MSL1

\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

## Dimensions



Unit: mm

**Figure 1. Dimensions**

## Pin Assignment

**Table 2. Pin Assignment**

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

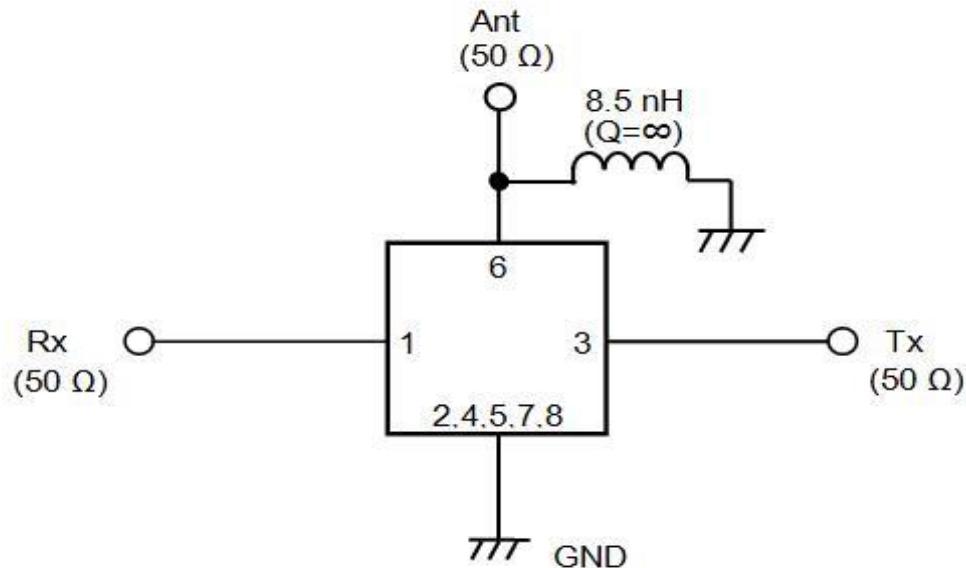


MSL1

\* Pb Free Part

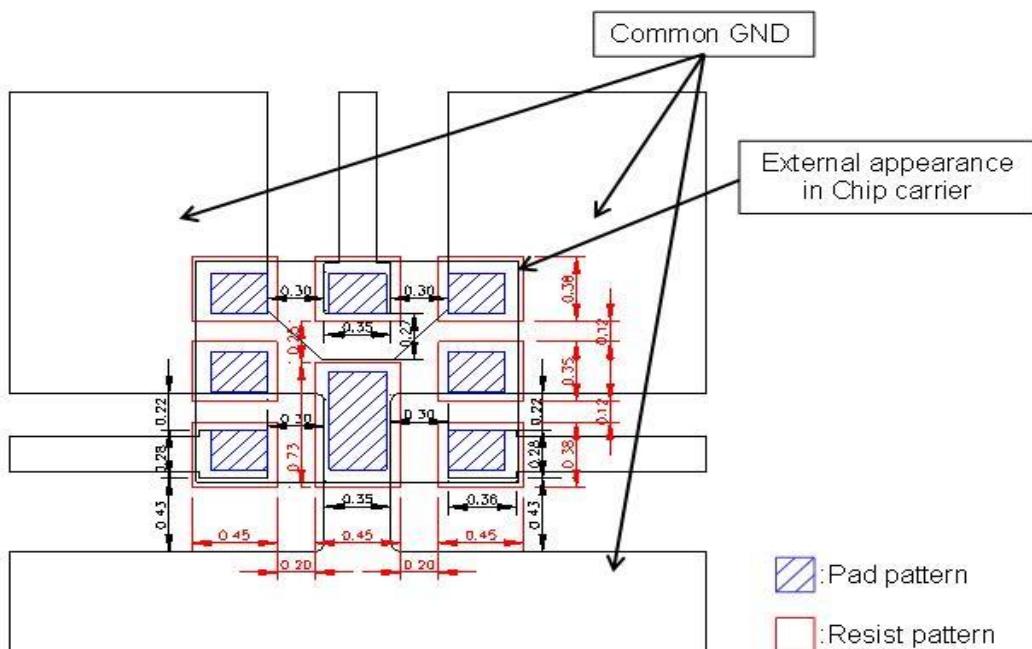
Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

## Evaluation Circuit



**Figure 2. Evaluation Circuit**

## Recommended Foot Print Pattern



**Figure 3. Recommended Foot Print Pattern**

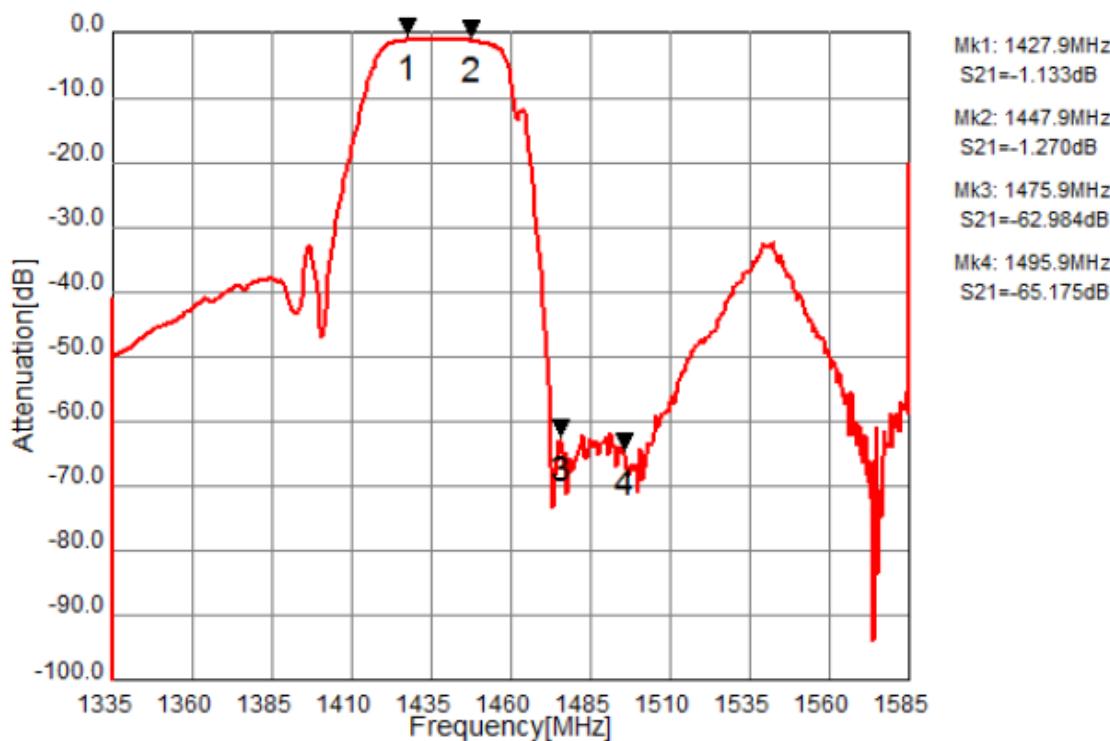


MSL1

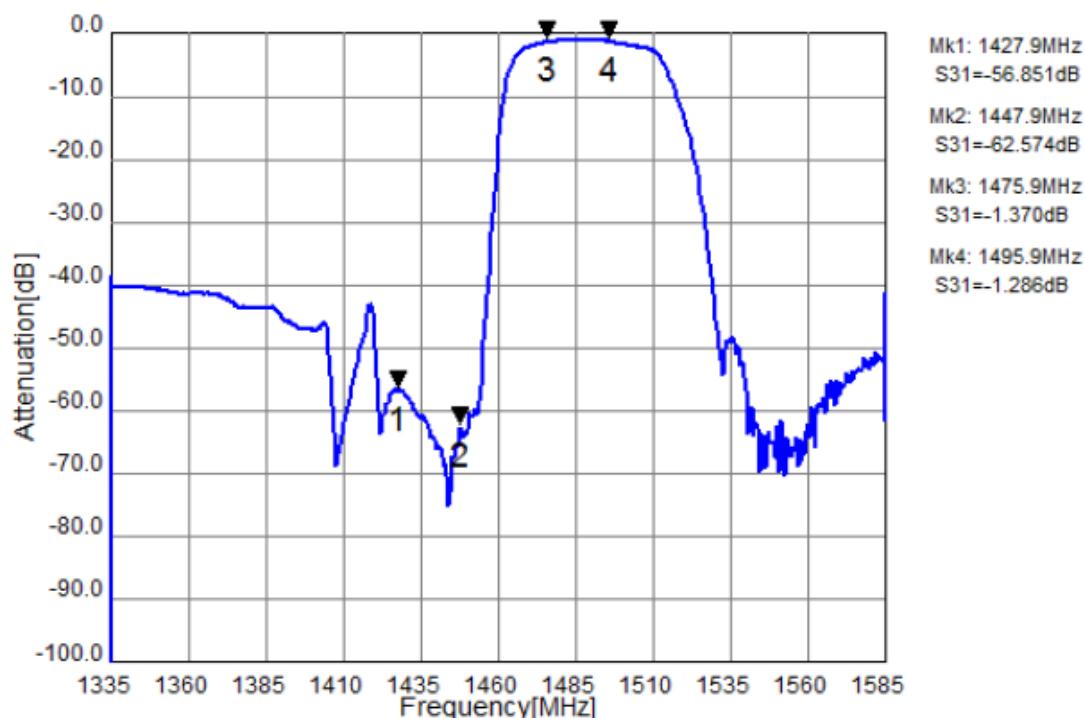
\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

### Tx to Ant



### Ant to Rx



**Figure 4-1. Electrical Characteristics**

These data exclude loss that comes from the test board.

**TAIYO YUDEN**

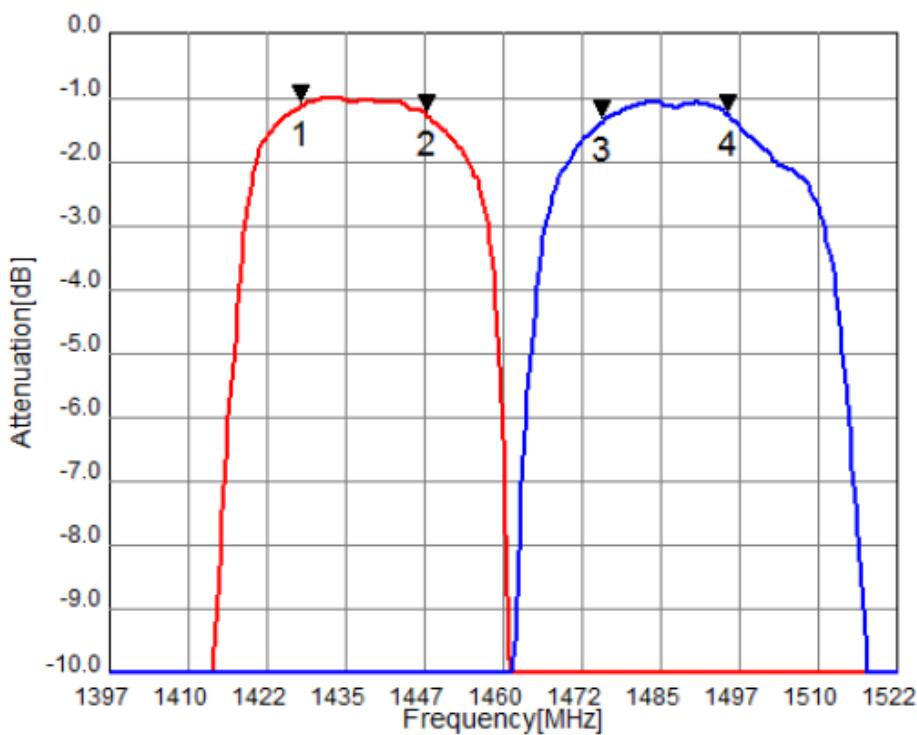


MSL1

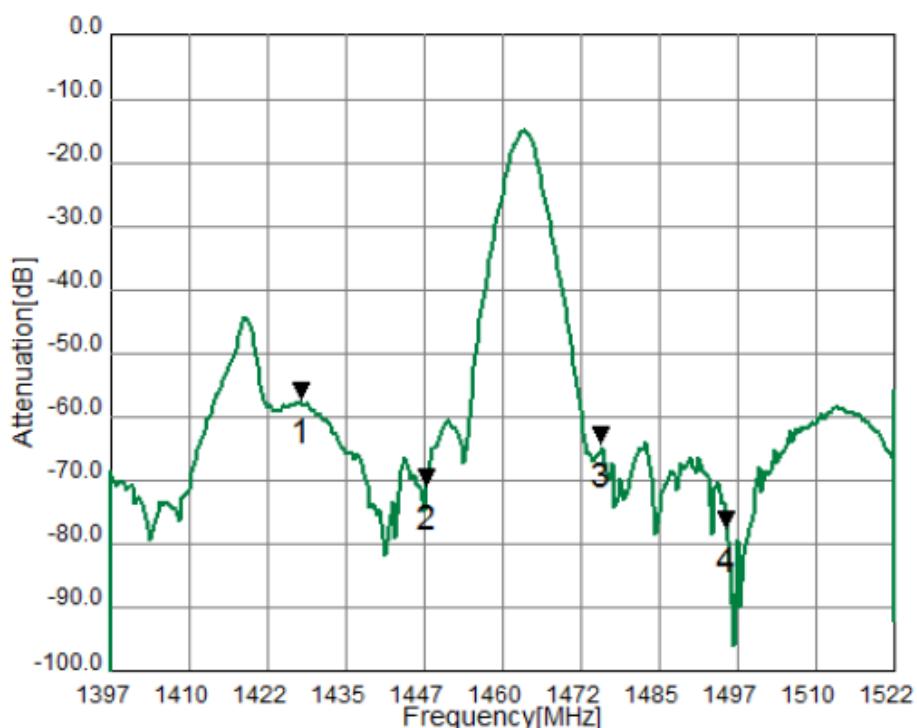
\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

### 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.

**TAIYO YUDEN**



MSL1

\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

### Tx Port

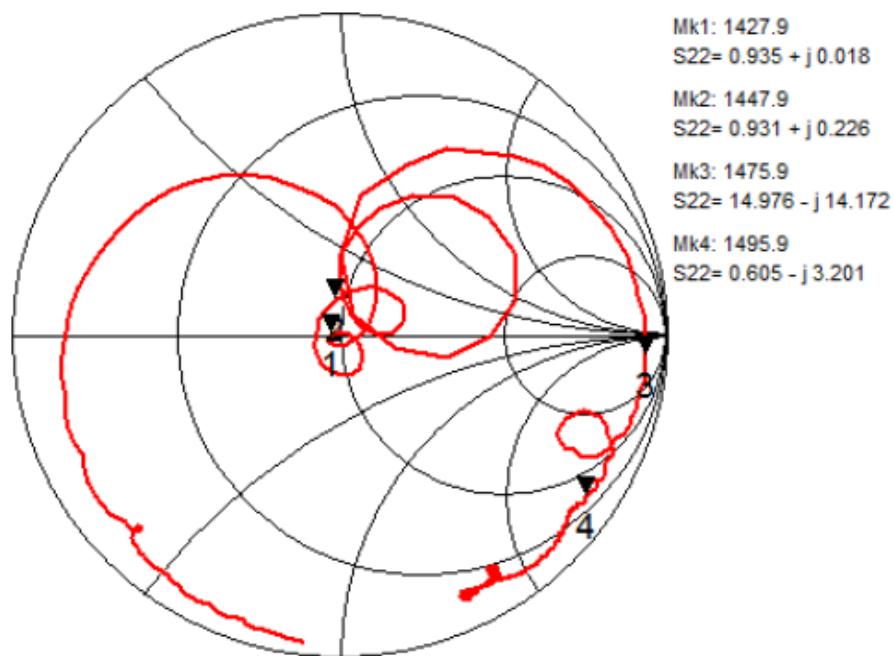
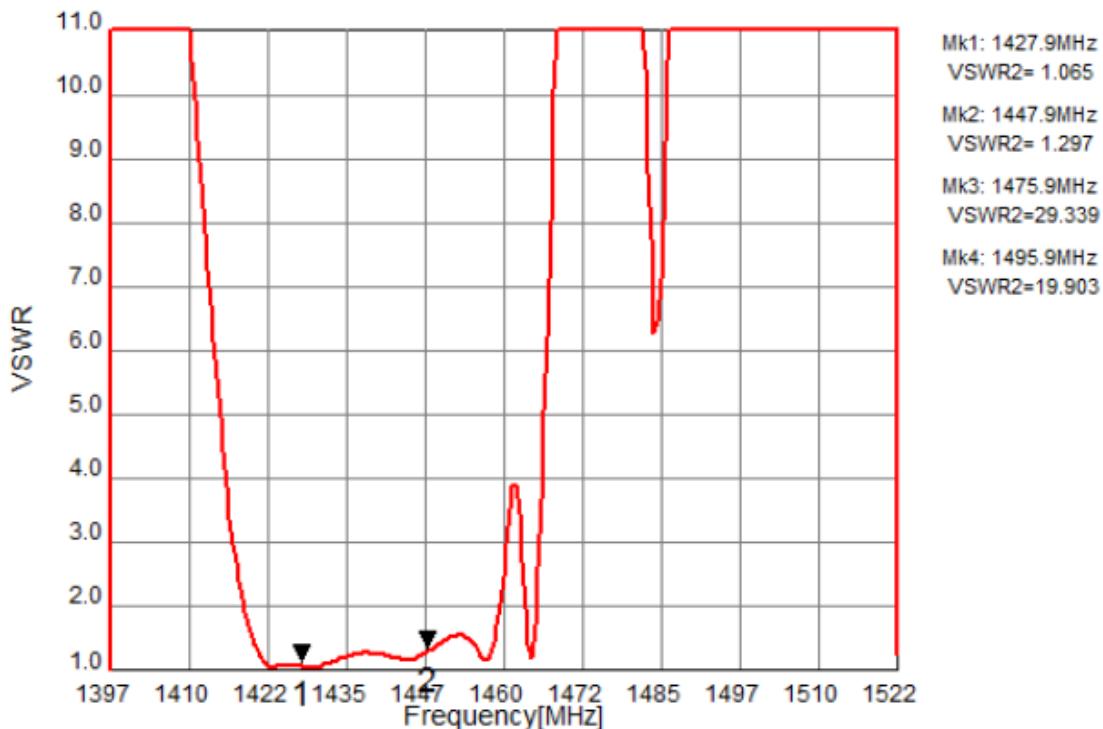


Figure 4-3. Electrical Characteristics



MSL1

\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

## Rx Port

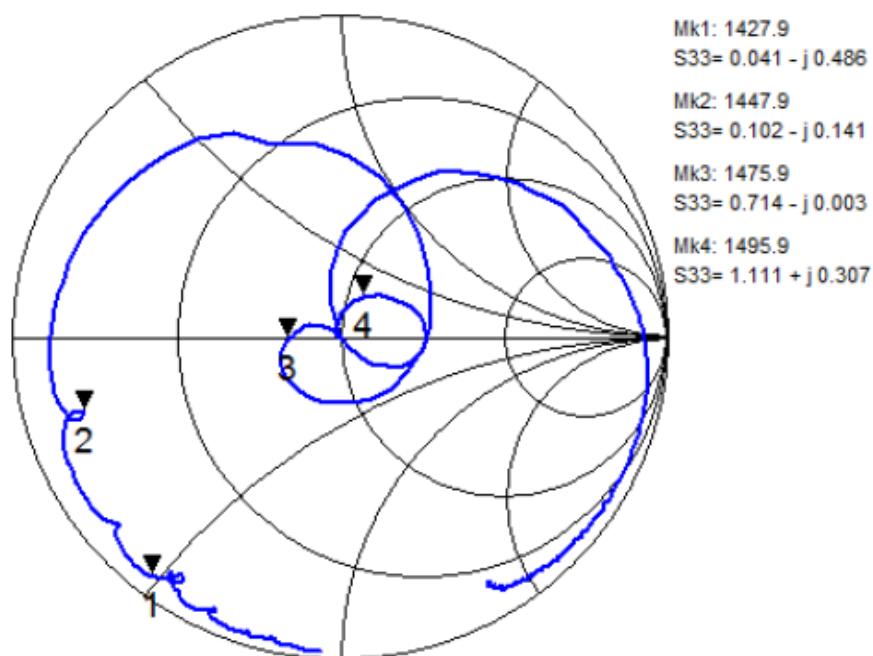
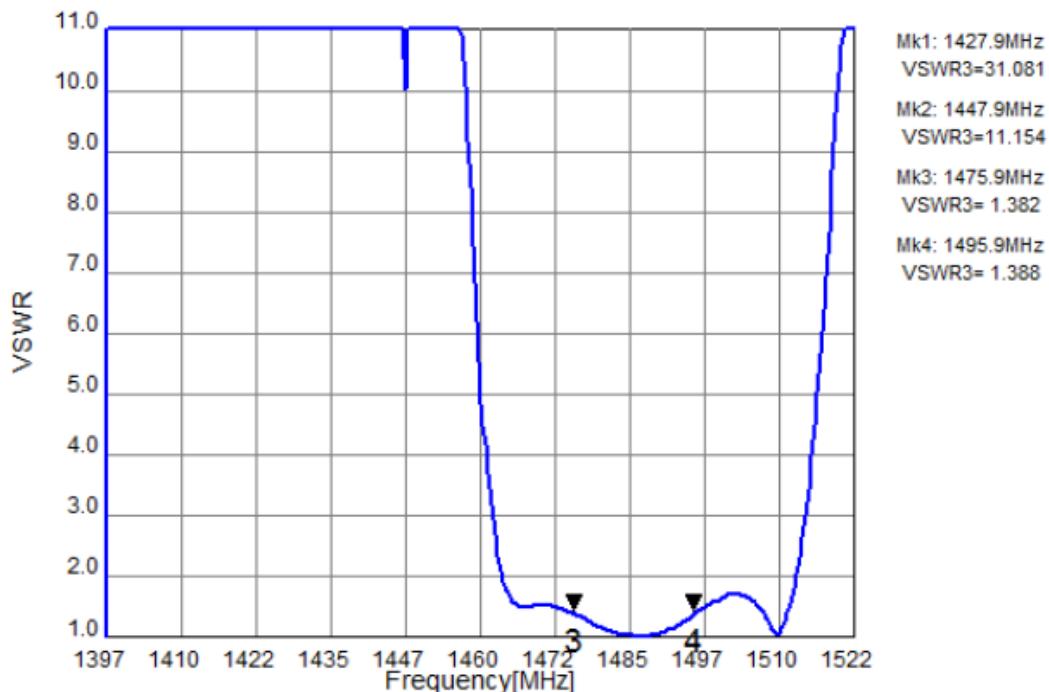


Figure 4-4. Electrical Characteristics



MSL1

\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

## Ant Port

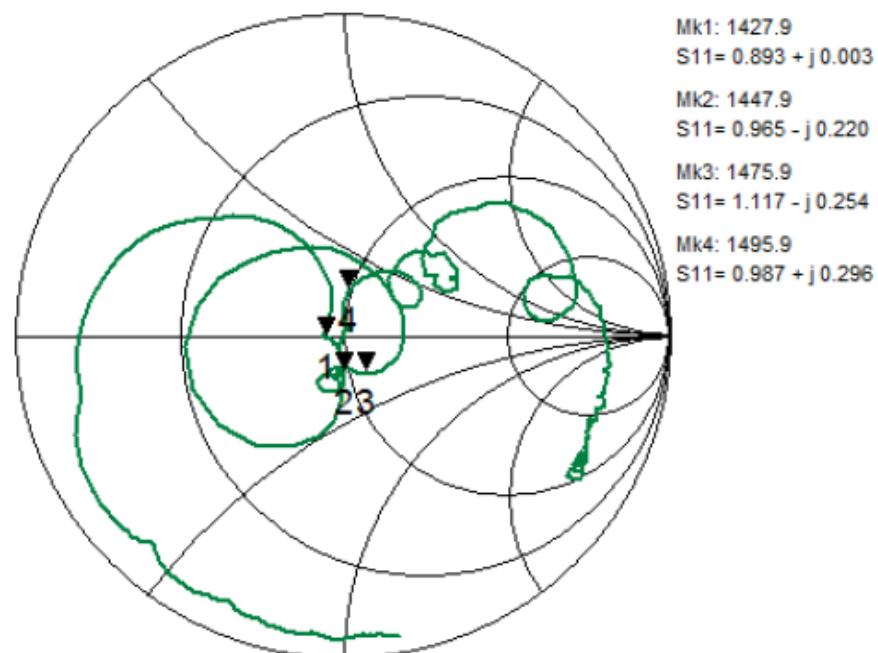
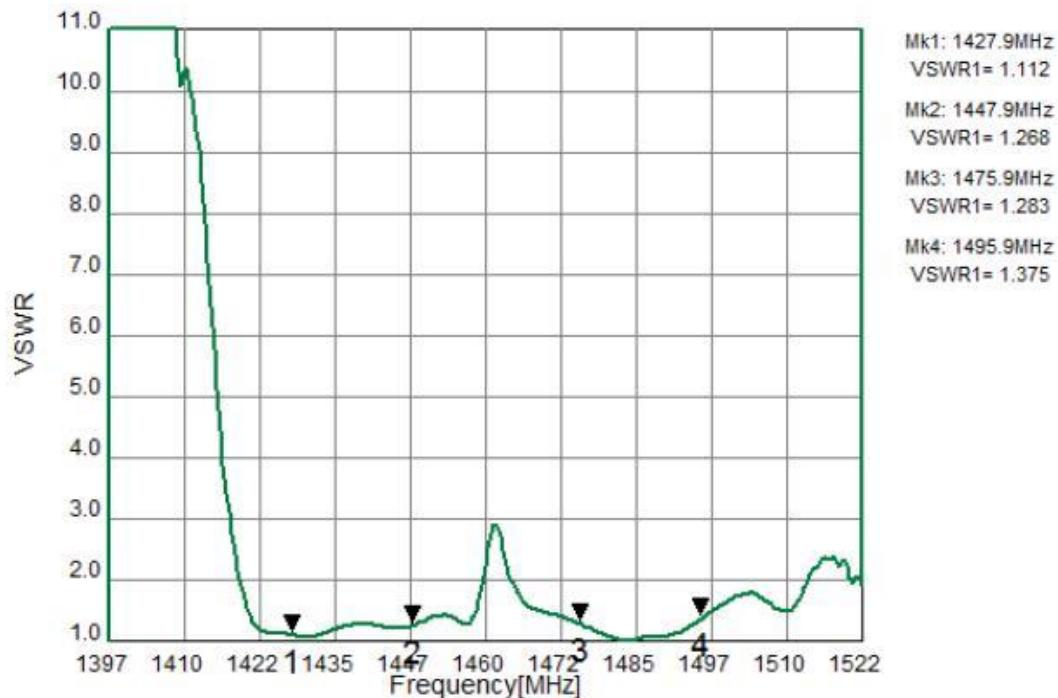


Figure 4-5. Electrical Characteristics

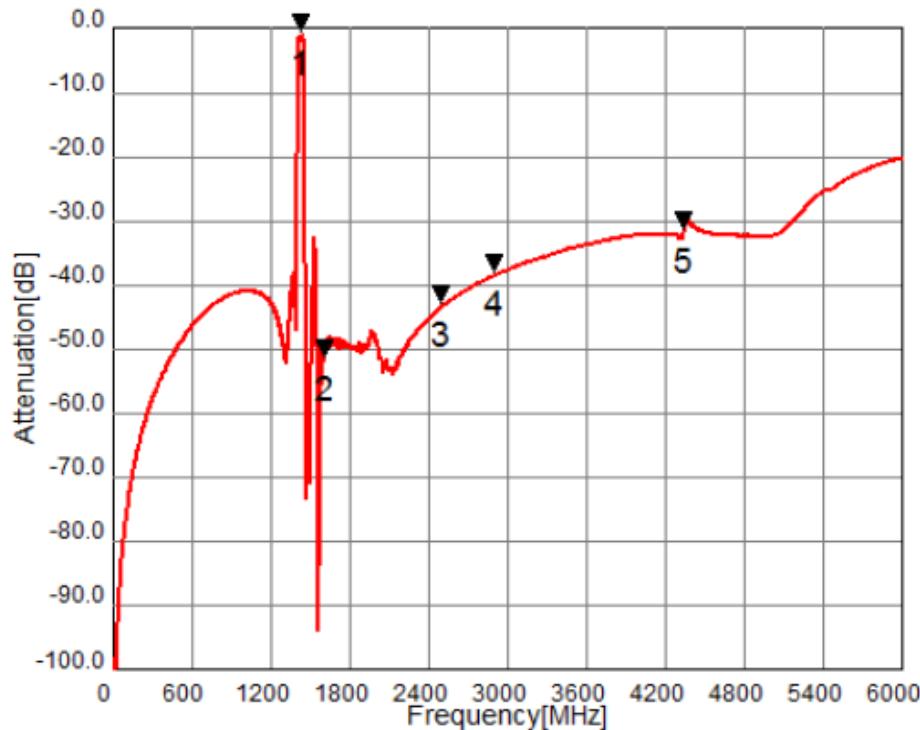


MSL1

\* Pb Free Part

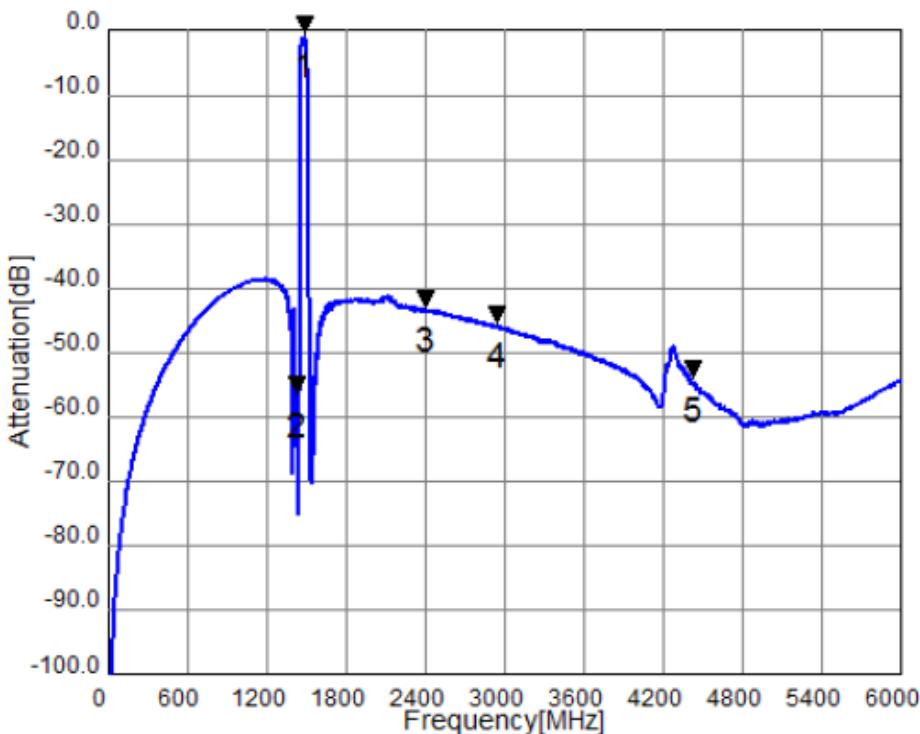
Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC

### Tx to Ant(Wide span)



Mk1: 1437.9MHz  
S21=-1.038dB  
Mk2: 1606.0MHz  
S21=-51.713dB  
Mk3: 2500.0MHz  
S21=-43.418dB  
Mk4: 2895.8MHz  
S21=-38.530dB  
Mk5: 4343.7MHz  
S21=-31.862dB

### Ant to Rx(Wide span)



Mk1: 1485.9MHz  
S31=-1.127dB  
Mk2: 1427.9MHz  
S31=-56.851dB  
Mk3: 2400.0MHz  
S31=-43.526dB  
Mk4: 2951.8MHz  
S31=-46.054dB  
Mk5: 4427.7MHz  
S31=-54.602dB

**Figure 4-6. Electrical Characteristics**



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band 11 Duplexer	Date	Mar. 07, 2018
Part Number	D6DA1G485K2W1	Version	2.2cbC
			Final

## Ordering Code

Ordering Code	Packing	Reel size	Status
D6DA1G485K2W1-Z	Tape & Reel	3,000 pcs.	MP
D6DA1G485K2W1-ZA	Tape & Reel	less than 3,000 pcs.	MP
D6DA1G485K2W1-Y	Tape & Reel	15,000 pcs.	MP
D6DA1G485K2W1-YA	Tape & Reel	less than 15,000 pcs.	MP
D6DA1G485K2W1-Q	Bulk	few pcs.	MP

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

\*MP : Mass Production

## Notice

- Please conduct validation and verification of our products in actual condition of mounting and operating environment before using our products.
- The products listed in this specification are intended for use in general electronic equipment (e.g., AV equipment, OA equipment, home electric appliances, office equipment, information and communication equipment including, without limitation, mobile phone, and PC). Please be sure to contact TAIYO YUDEN for further information before using the products for any equipment which may directly cause loss of human life or bodily injury (e.g., transportation equipment including, without limitation, automotive powertrain control system, train control system, and ship control system, traffic signal equipment, disaster prevention equipment, medical equipment classified as Class I, II or III by IMDRF, highly public information network equipment including, without limitation, telephone exchange, and base station).  
Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).  
When our products are used even for high safety and/or reliability-required devices or circuits of general electronic equipment, it is strongly recommended to perform a thorough safety evaluation prior to use of our products and to install a protection circuit as necessary.  
Please note that unless you obtain prior written consent of TAIYO YUDEN, TAIYO YUDEN shall not be in any way responsible for any damages incurred by you or third parties arising from use of the products listed in this specification for any equipment requiring inquiry to TAIYO YUDEN or prohibited for use by TAIYO YUDEN as described above.
- Information contained in this specification is intended to convey examples of typical performances and/or applications of our products and is not intended to make any warranty with respect to the intellectual property rights or any other related rights of TAIYO YUDEN or any third parties nor grant any license under such rights.
- Please note that the scope of warranty for our products is limited to the delivered our products themselves and TAIYO YUDEN shall not be in any way responsible for any damages resulting from a fault or defect in our products. Notwithstanding the foregoing, if there is a written agreement (e.g., supply and purchase agreement, quality assurance agreement) signed by TAIYO YUDEN and your company, TAIYO YUDEN will warrant our products in accordance with such agreement.
- The contents of this specification are applicable to our products which are purchased from our sales offices or authorized distributors (hereinafter "TAIYO YUDEN's official sales channel"). Please note that the contents of this specification are not applicable to our products purchased from any seller other than TAIYO YUDEN's official sales channel.
- Caution for Export  
Some of our products listed in this specification may require specific procedures for export according to "U.S. Export Administration Regulations", "Foreign Exchange and Foreign Trade Control Law" of Japan, and other applicable regulations. Should you have any questions on this matter, please contact our sales staff.