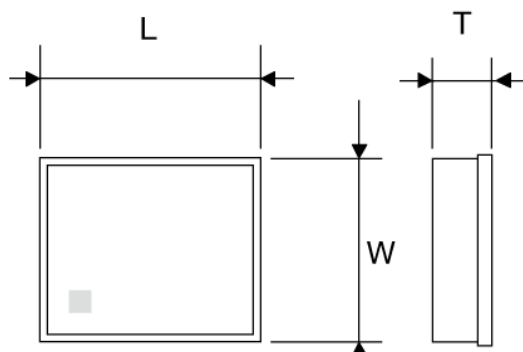


SAW Dual Filter

G6QD2G017N2DU



■ Features

- Item Summary
TD-SCDMA, 604
- Lifecycle Stage
Mass Production
- Standard packaging quantity (minimum)
Taping Embossed 5000 , 15000pcs

■ Products characteristics table

Temperature Range	-30 to +85°C
Band(3GPP)	B39 / B34
Use	TDSCDMA
Insertion Loss	1.7/2.0dB
RoHS Compliance	Yes
Halogen Free	Yes
Soldering Method	Reflow

■ External Dimensions

L	1.5mm +0.1:-0.1
W	1.1mm +0.1:-0.1
T	0.5mm max

2015.06.03

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.



MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

Table 1.Electrical specifications (Filter 1)

Pass Band (1880-1920MHz)						
Item	Condition (MHz)	Specification			Unit	Remark
		Min.	Typ.	Max.		
Insertion Loss	1880-1920	-	1.7	2.3	dB(*1)	
Ripple	1880-1920	-	0.5	1.2	dB	
Absolute attenuation	0.3-1735	35	43	-	dB	
	1735-1795	30	32	-	dB	
	1795-1820	25	32	-	dB	
	1820-1850	13	22	-	dB	
	1950-1980	13	20	-	dB	
	1980-2025	15	25	-	dB	
	2025-6000	25	28	-	dB	
VSWR (Input)	1880-1920	-	1.6	2.0	-	
VSWR (Output)	1880-1920	-	1.6	2.0	-	
Amplitude Balance S ₂₁ / S ₃₁	1880-1920	-1.5	+/-1.0	+1.5	dB	
Phase Balance (Φ S ₂₁ - Φ S ₃₁)-180	1880-1920	-10	+/-5.0	+10	deg.	
Input impedance (Unbalanced)		50//4.3nH			Ohm	
Output impedance (Balanced)		100//22nH			Ohm	
Operating temperature		-30to +85			°C	

(*1) These data include loss that comes from the test board.(0.15dB)



MSL1

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Table 2.Electrical specifications(Filter 2)

Pass Band (2010-2025MHz)						
Item	Condition (MHz)	Specification			Unit	Remark
		Min	Typ.	Max.		
Insertion Loss	2010-2025	-	2.0	2.5	dB ^(*1)	
Ripple	2010-2025	-	0.5	1.2	dB	
Absolute attenuation	0.3-1815	35	45	-	dB	
	1815-1840	35	45	-	dB	
	1840-1895	30	37	-	dB	
	1925-1980	14	23	-	dB	
	2050-2085	4	6	-	dB	
	2085-2110	15	18	-	dB	
VSWR (Input)	2010-2025	-	1.6	2.0	-	
VSWR (Output)	2010-2025	-	1.6	2.0	-	
Amplitude Balance S21 / S31	2010-2025	-2.0	+/-1.5	+2.0	dB	
Phase Balance (Φ S21- Φ S31)-180	2010-2025	-12	+/-5.0	+12	deg.	
Input impedance (Unbalanced)		50//4.3nH			Ohm	
Output impedance (Balanced)		100//18nH			Ohm	
Operating temperature		-30to +85			°C	

(*1) These data include loss that comes from the test board.(0.15dB)



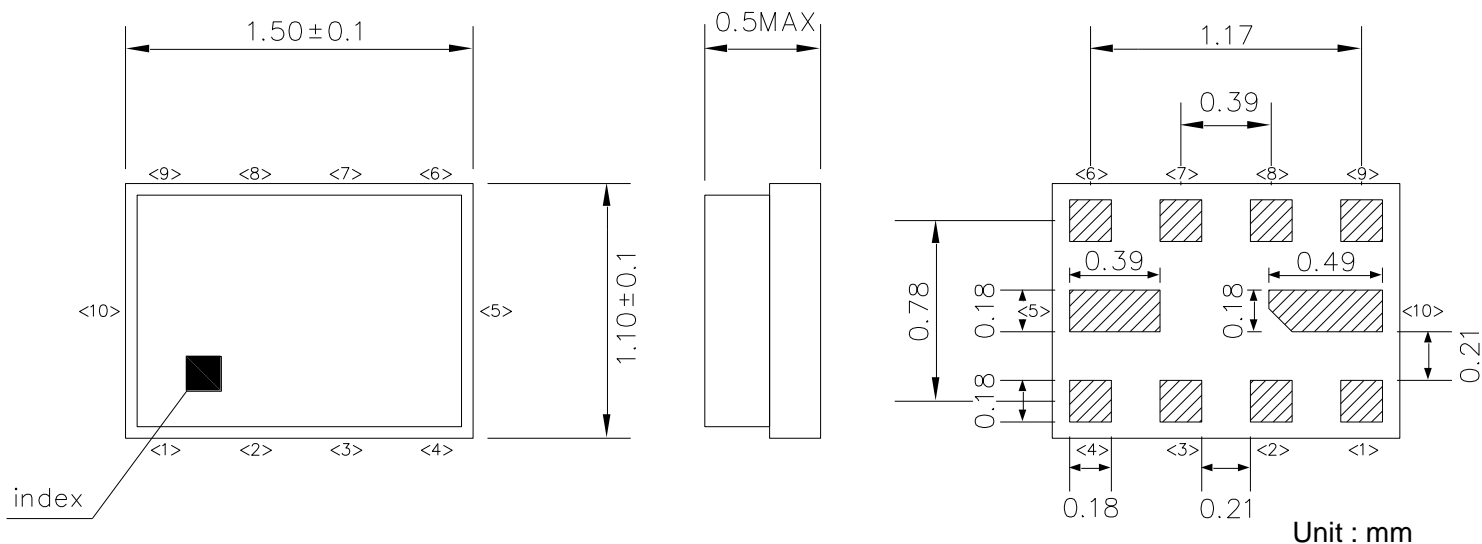
MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

Dimensions

Device size: 1.5yp. x 1.1typ. x 0.5max.



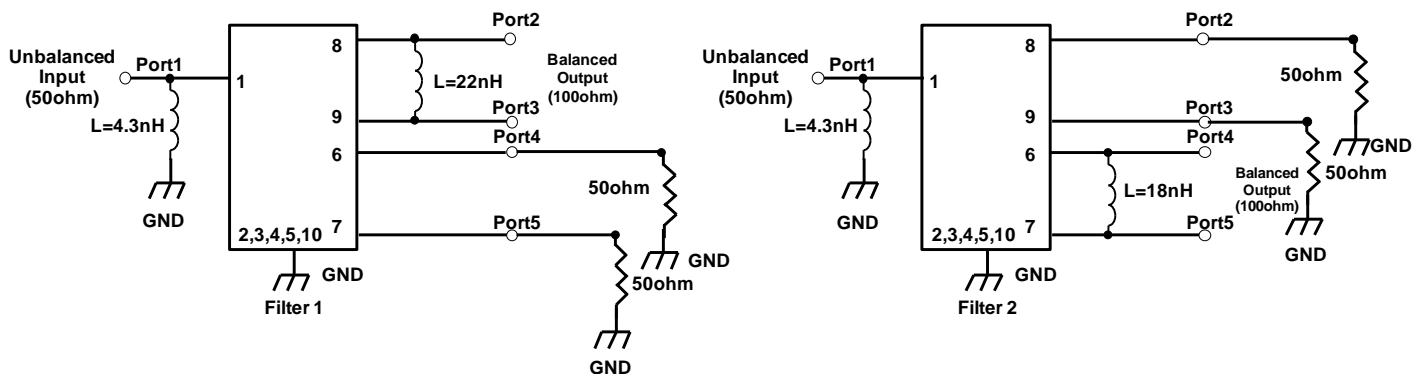
Unit : mm

Pin Configuration

Pin No.	Pin name	Description
1	IN	Filter1,2 input pin
2	GND	Ground
3	GND	Ground
4	GND	Ground
5	GND	Ground
6	OUT	Filter2 balanced output pin
7	OUT	Filter2 balanced output pin
8	OUT	Filter1 balanced output pin
9	OUT	Filter1 balanced output pin
10	GND	Ground

Filter No.	Passband(MHz)	System
1	1880 ~ 1920	Band39
2	2010 ~ 2025	Band34

Evaluation Circuit





MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
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Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

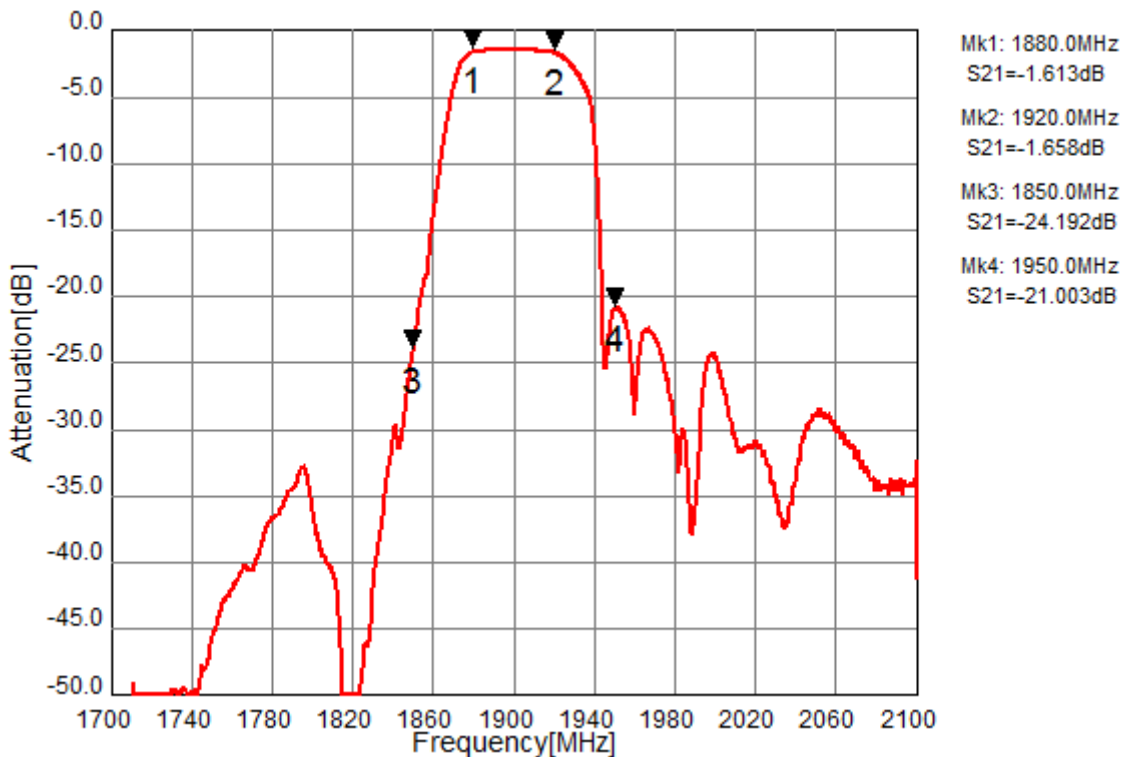


Fig.1 Pass-band Characteristic (Filter1)

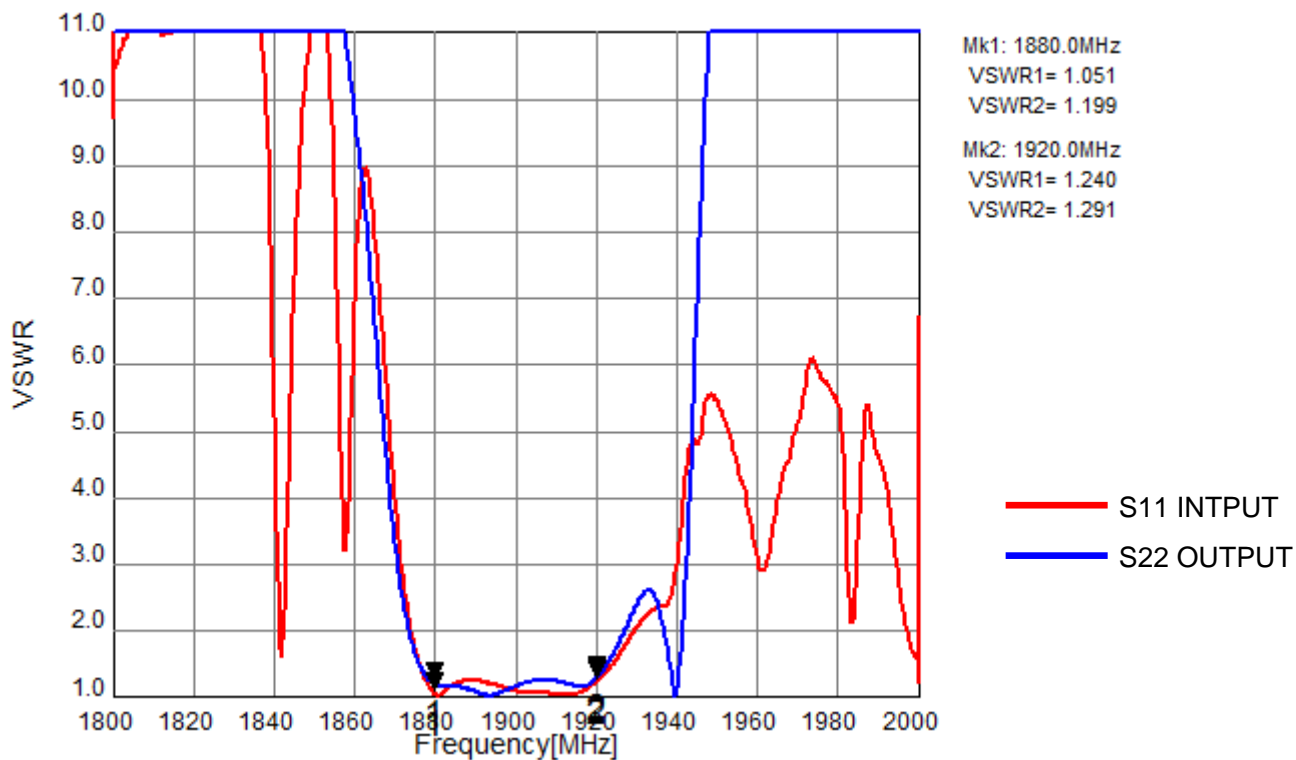


Fig.2 VSWR(Filter1)



MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
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Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

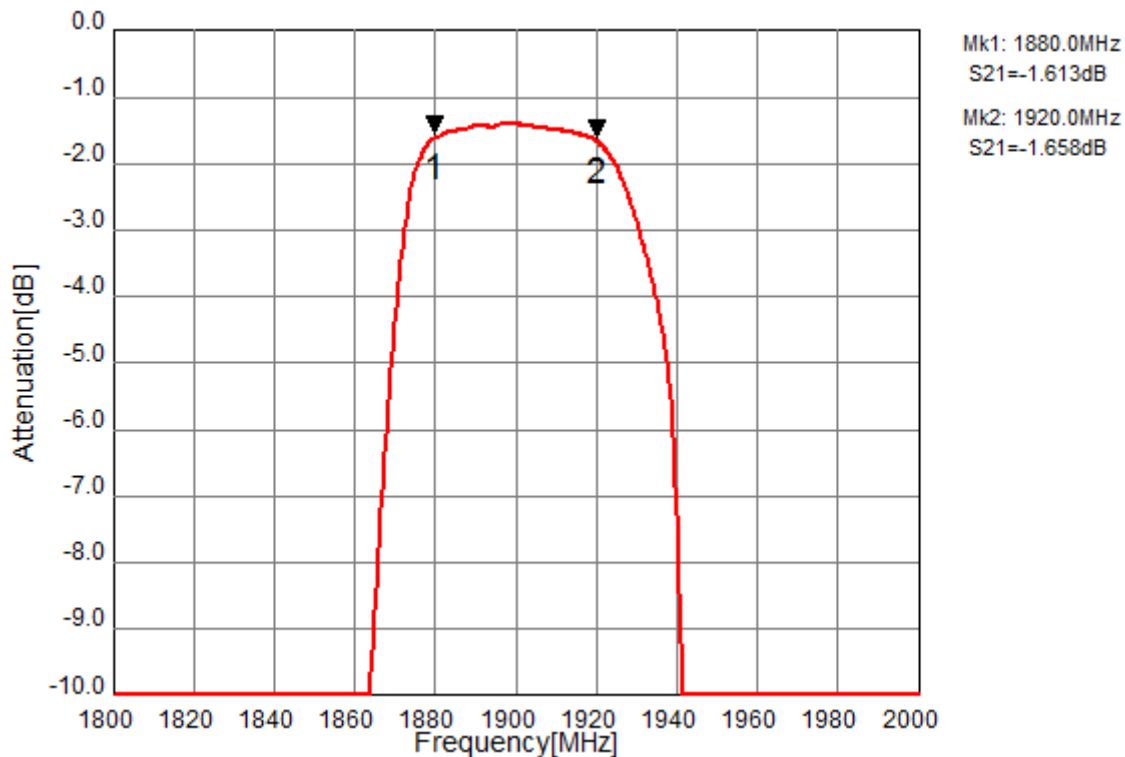


Fig.3 In-band Characteristic (Filter2)

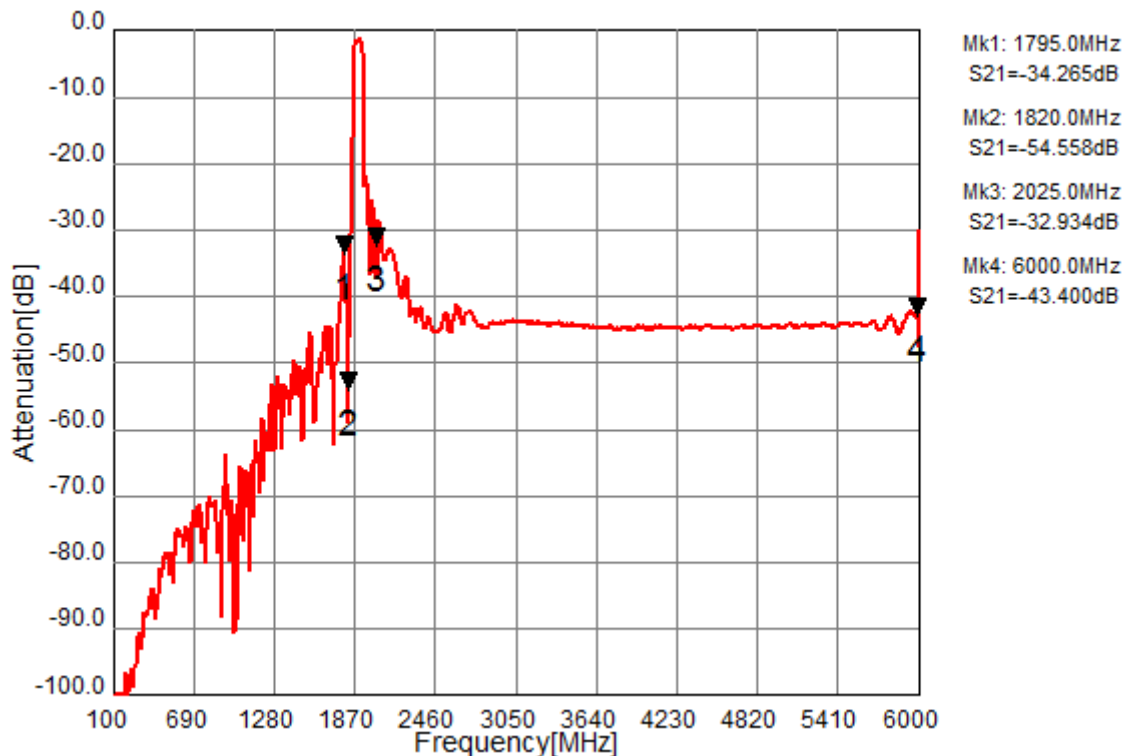


Fig.4 Wide-band Characteristic (Filter1)

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*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

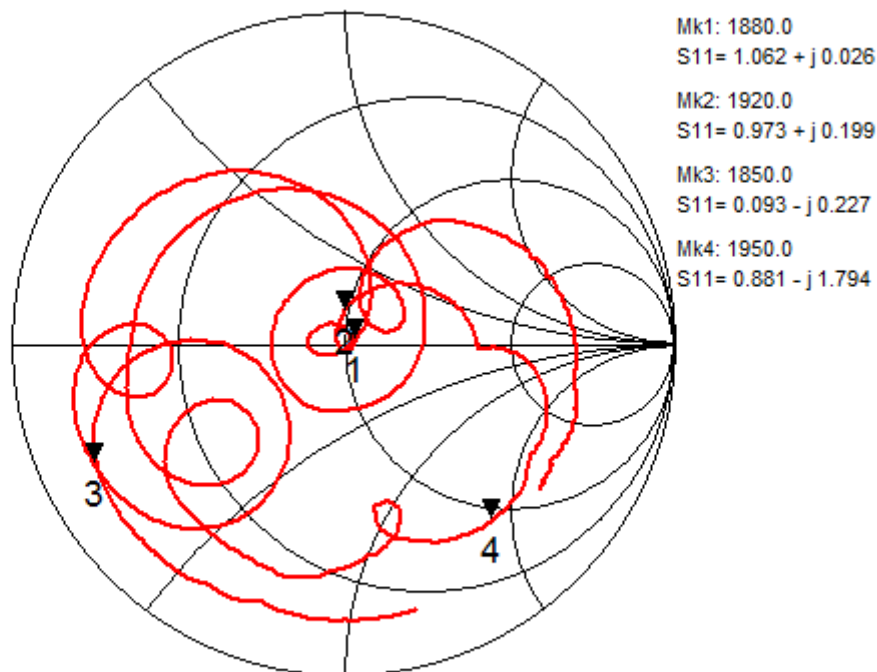


Fig.5 Impedance (INPUT) (Filter1)

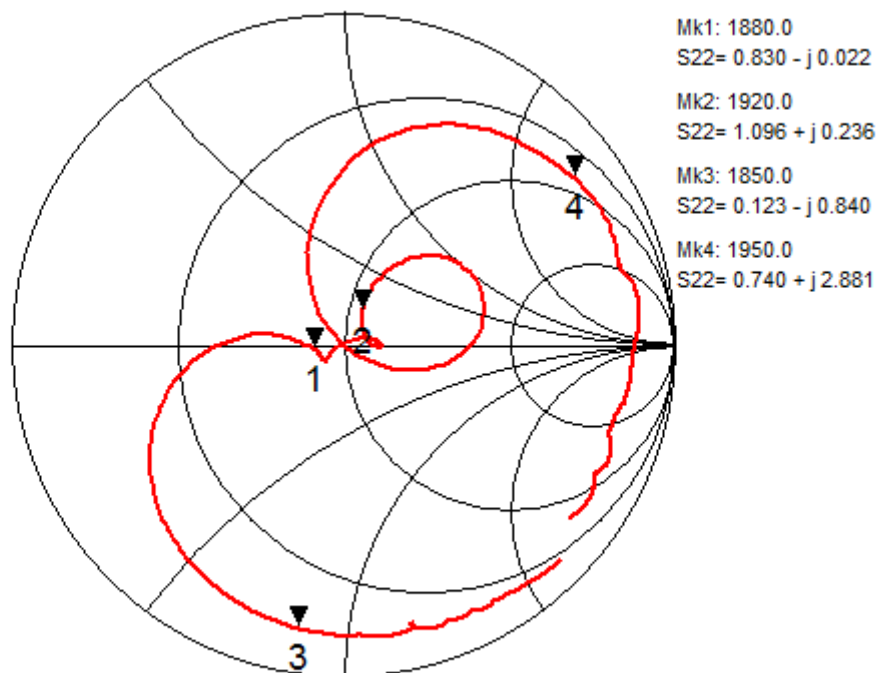


Fig.6 Impedance (OUTPUT) (Filter1)



MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

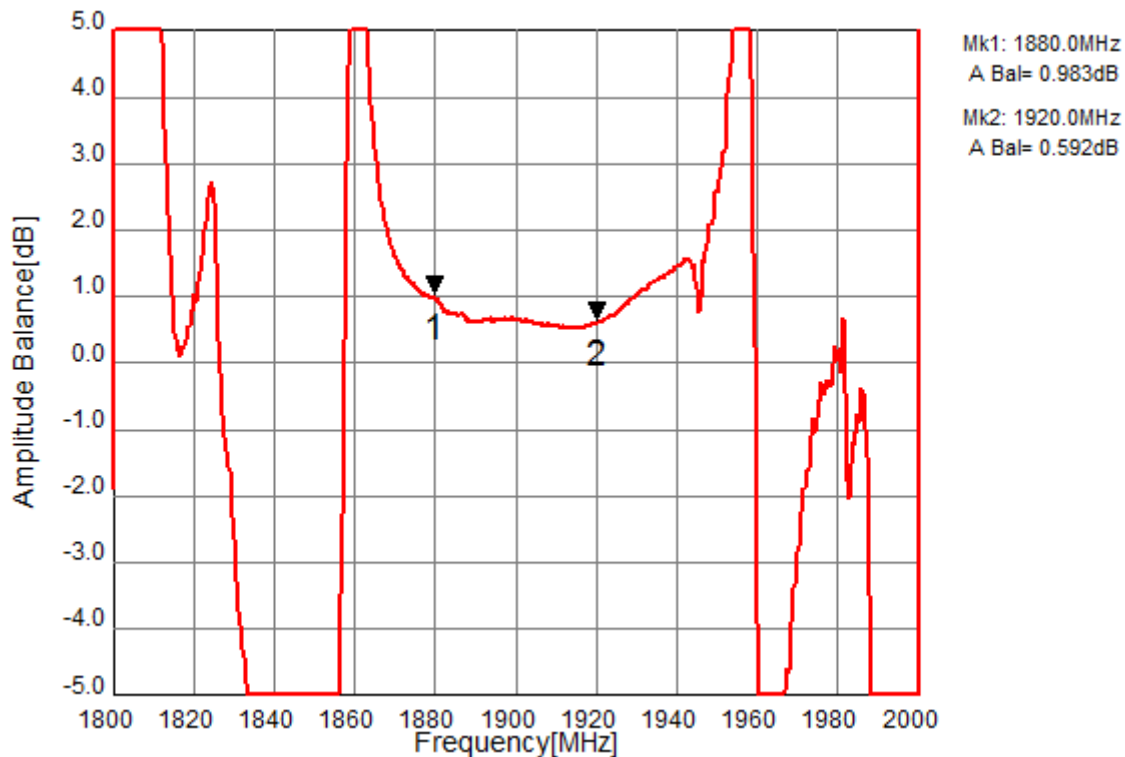


Fig.7 Amplitude Balance (Filter1)

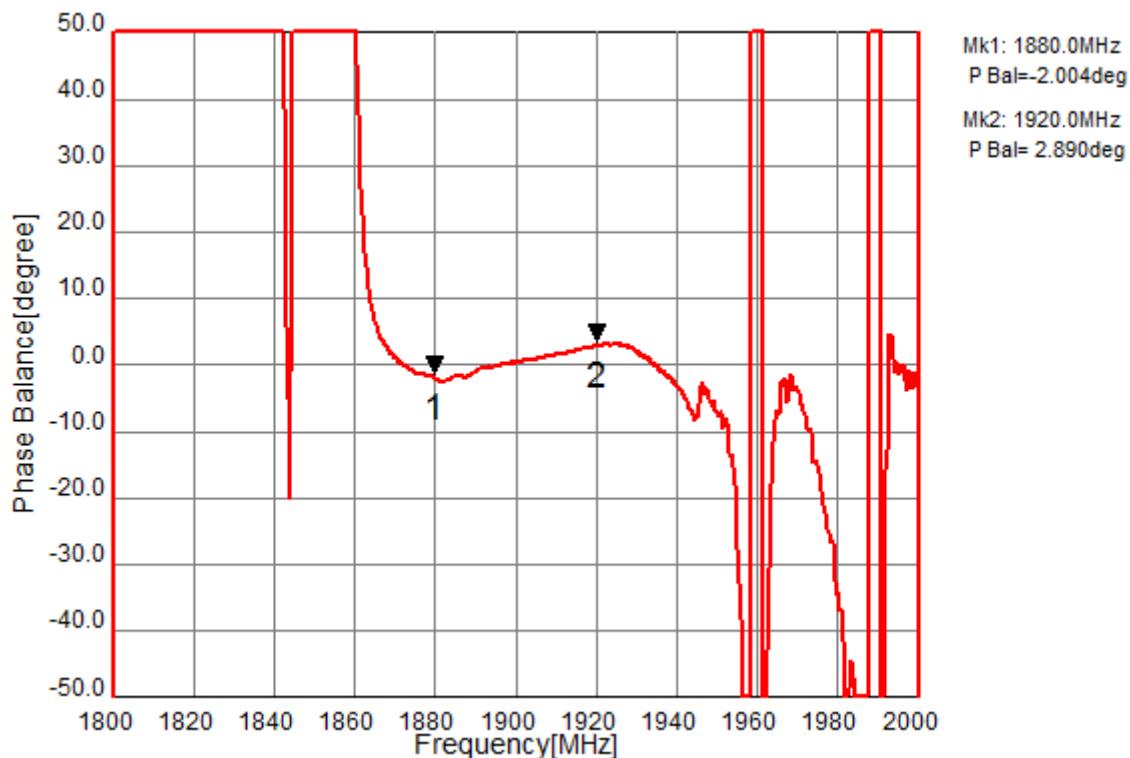


Fig.8 Phase Balance (Filter1)



MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

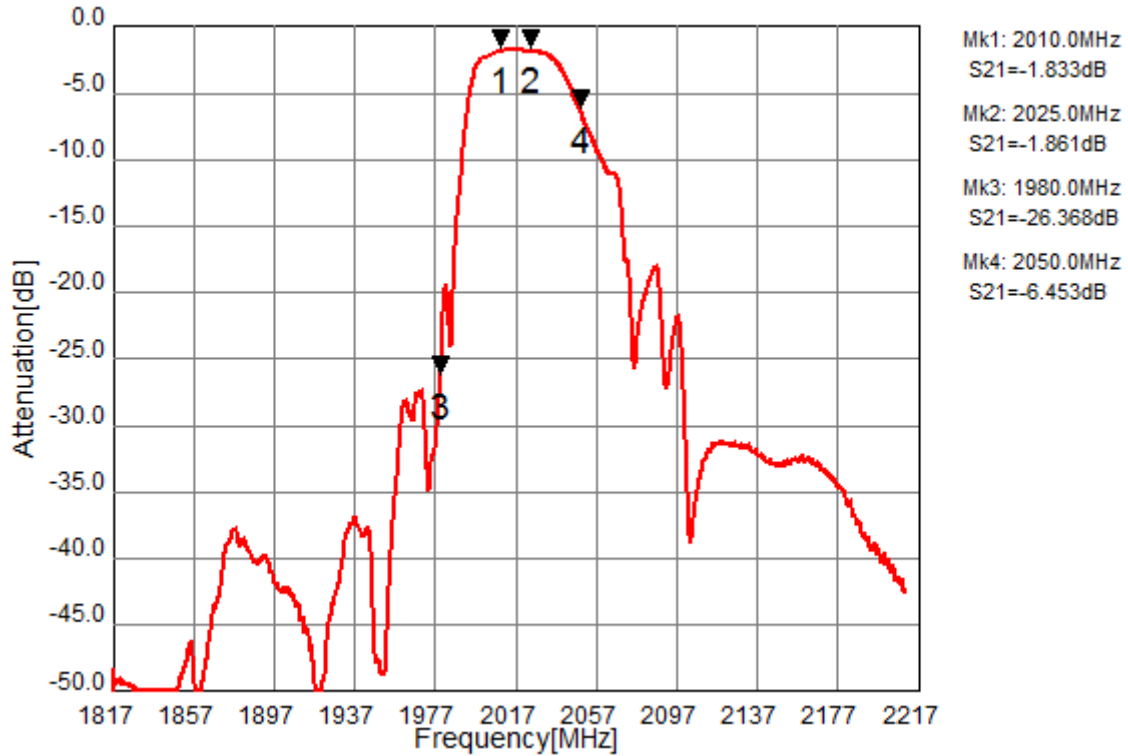


Fig.9 Pass-band Characteristic (Filter2)

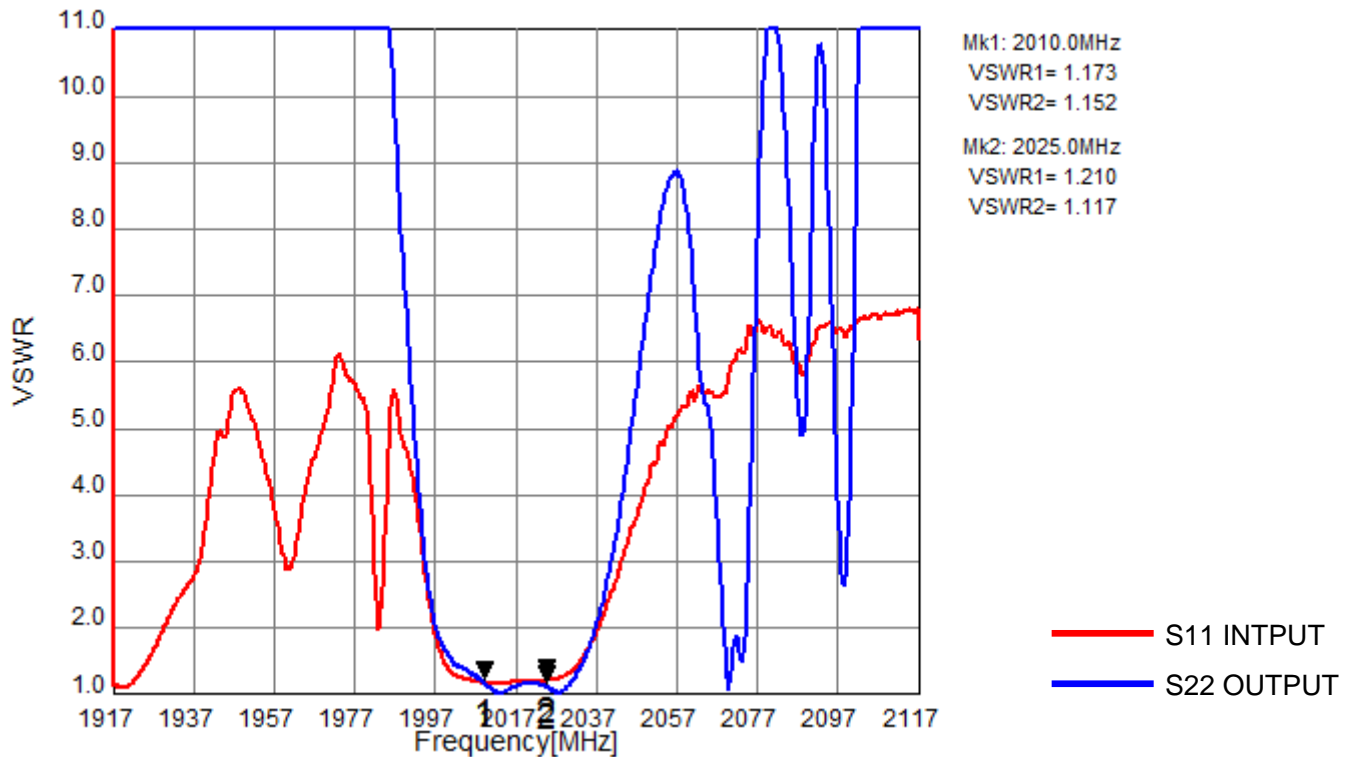


Fig.10 VSWR (Filter2)



MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

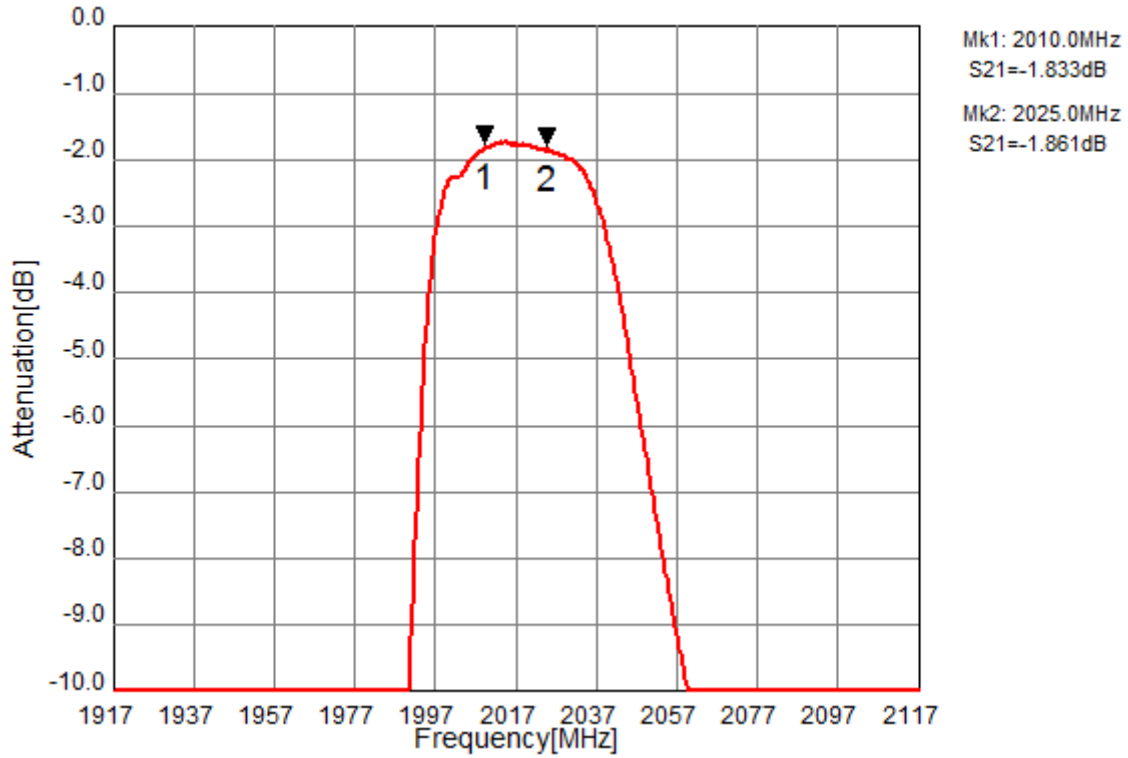


Fig.11 In-band Characteristic (Filter1)

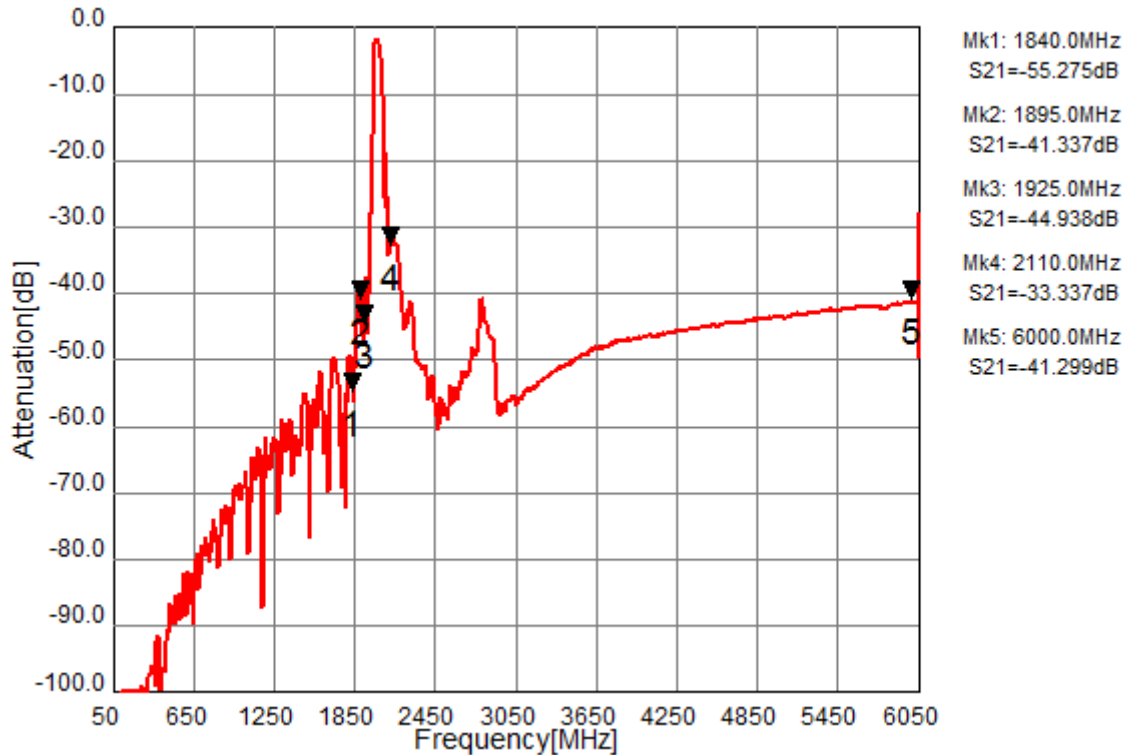


Fig.12 Wide-band Characteristic (Filter2)



MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

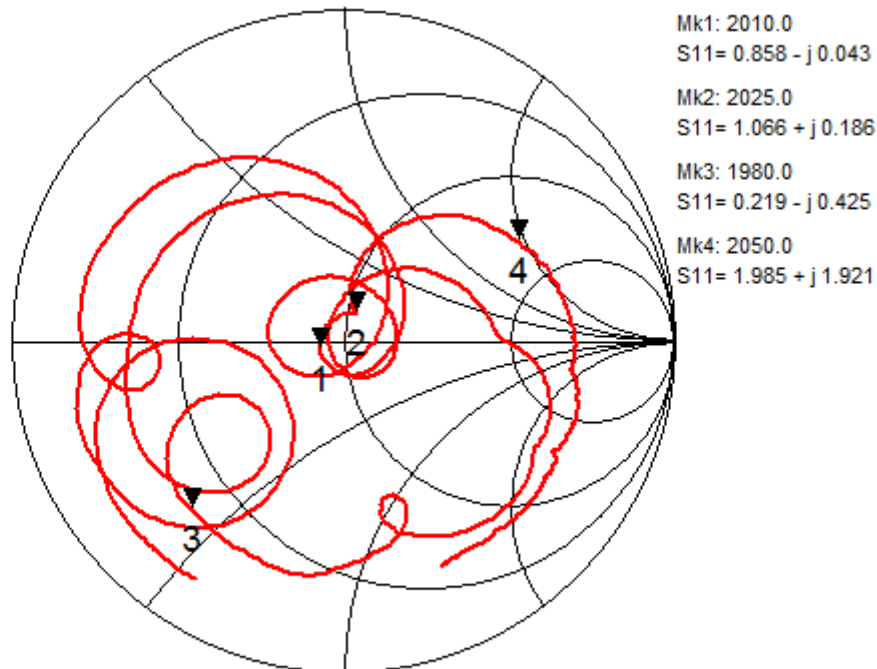


Fig.13 Impedance (INPUT) (Filter2)

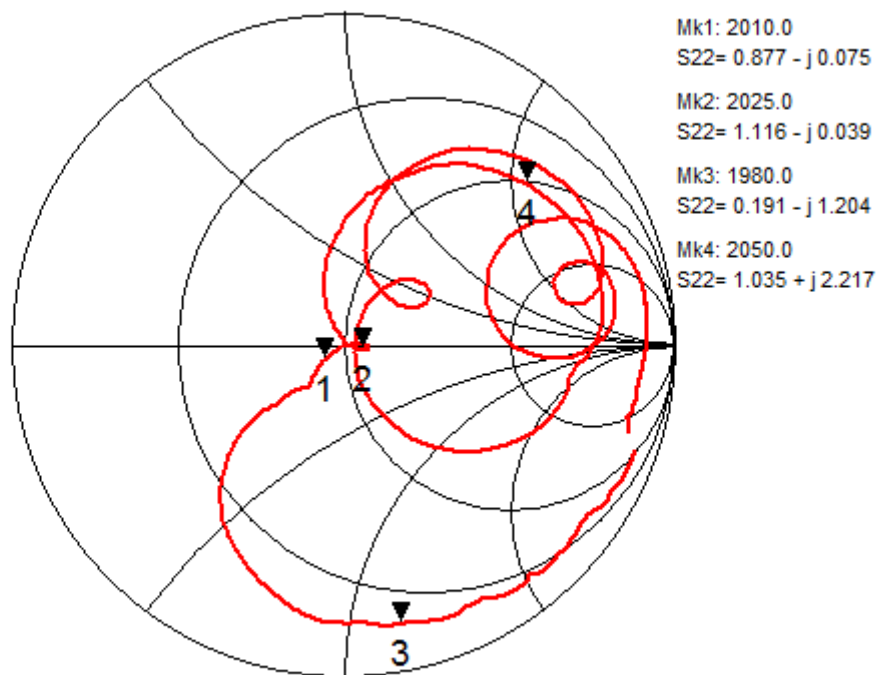


Fig.14 Impedance (OUTPUT) (Filter2)



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*Pb Free part

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System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

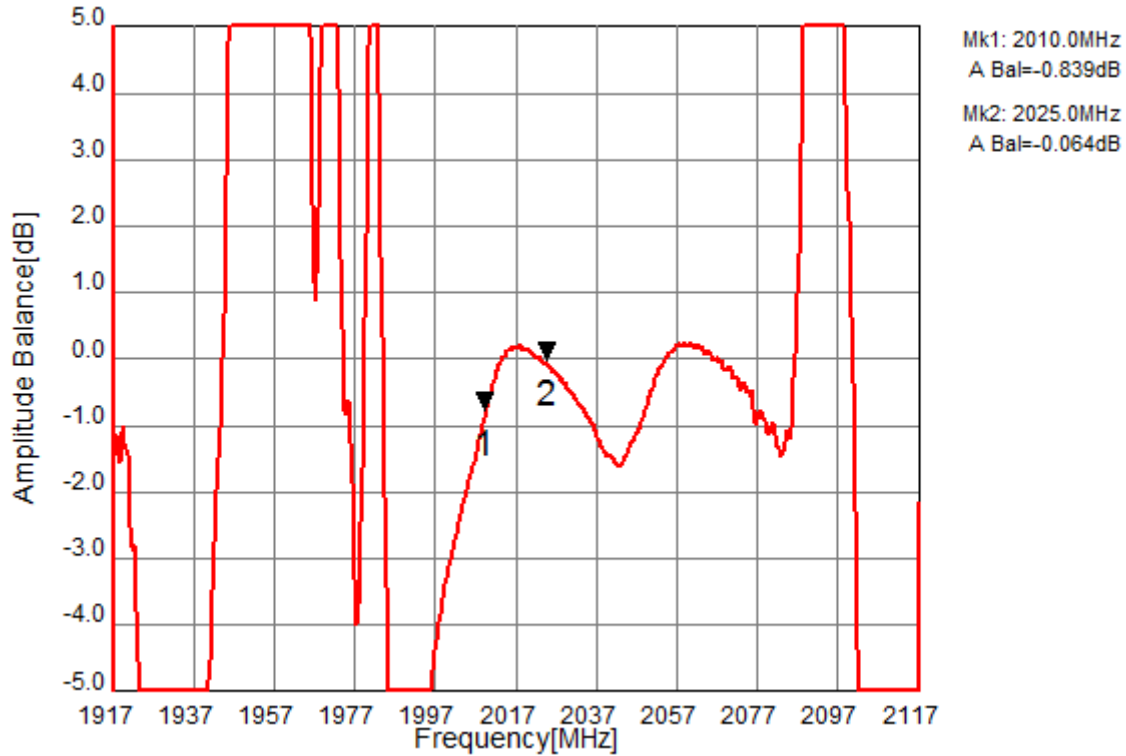


Fig.15 Amplitude Balance (Filter2)

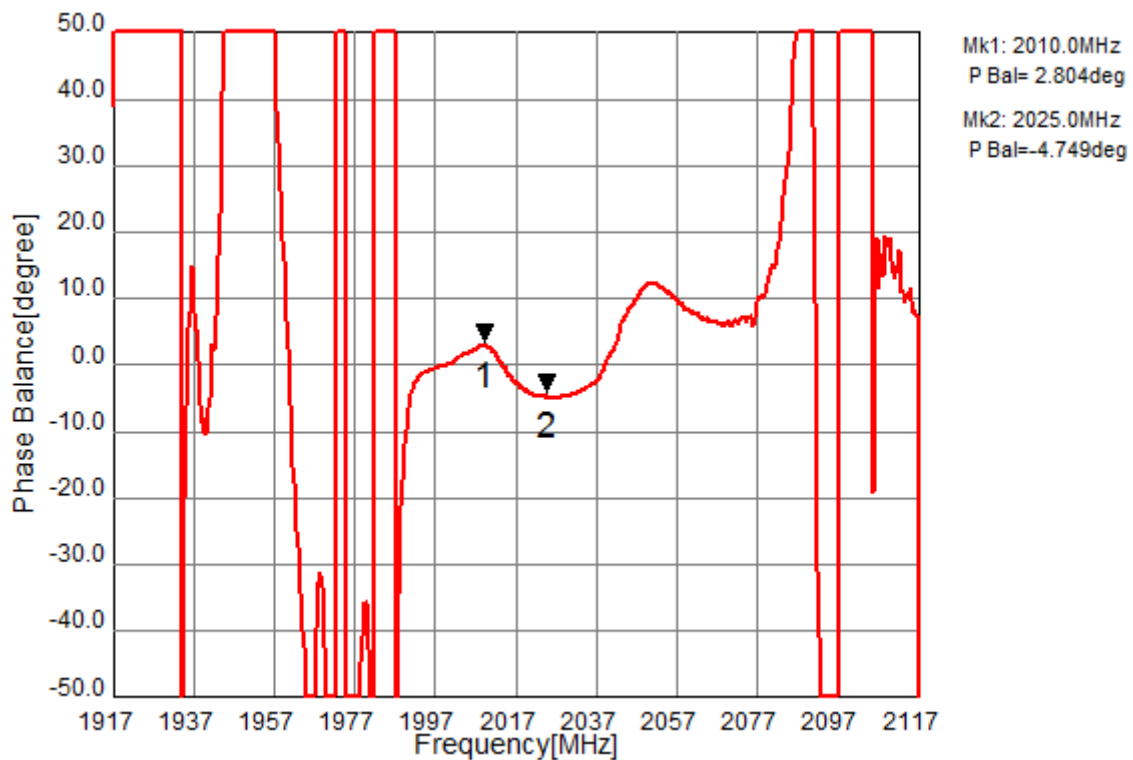


Fig.16 Phase Balance (Filter2)



MSL1

*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	TD-SCDMA Band39/Band34 Dual	DATE	Apr. 26, 2013
Part Number	G6QD2G017N2DU	Version 2.1bbA	Final

Ordering Code

Ordering Code	Packing	Reel size	Status
G6QD2G017N2DU-J	Tape & Reel	5,000 pcs.	MP
G6QD2G017N2DU-JA	Tape & Reel	less than 5,000 pcs.	MP
G6QD2G017N2DU-Y	Tape & Reel	15,000 pcs.	MP
G6QD2G017N2DU-YA	Tape & Reel	less than 15,000 pcs.	MP
G6QD2G017N2DU-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.