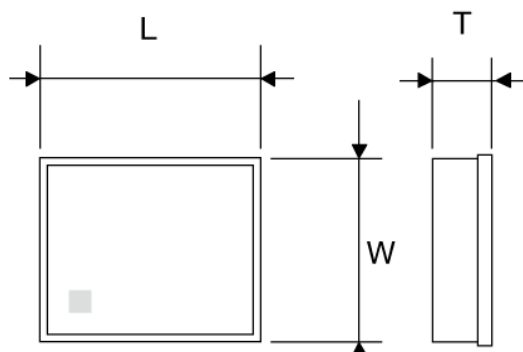


## SAW Dual Filter

## FAR-G6KZ-1G8425-Y4WZ



## ■ Features

- Item Summary  
GSM900/1800 , Rx, 705
- Lifecycle Stage  
Mass Production
- Standard packaging quantity (minimum)  
Taping Embossed 3000 , 15000pcs

## ■ Products characteristics table

Temperature Range	-30 to +85°C
GSM	900 / 1800
Use	GSM
Transmitting / Receiving	Rx Dual Filter
Insertion Loss	1.8/1.6dB
Attenuation	31/16dB
RoHS Compliance	Yes
Halogen Free	Yes
Soldering Method	Reflow

## ■ External Dimensions

L	1.8mm +0.1:-0.1
W	1.4mm +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	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

Table 1. Electrical specifications(Filter 1)

Pass Band (925-960MHz)						
Item	Condition (MHz)	Specification			Unit	Remark
		Min.	Typ.	Max.		
Insertion Loss	925-960	-	1.8	2.4	dB (*1)	
Ripple	925-960	-	0.7	1.4	dB	
Input VSWR	925-960	-	1.6	2.1	-	
Output VSWR	925-960	-	1.5	2.1	-	
Absolute attenuation	DC-880	40	57	-	dB	
	880-905	30	36	-	dB	
	905-915	20	31	-	dB	
	980-1025	25	33	-	dB	
	1025-2880	36	53	-	dB	
	2880-6000	30	40	-	dB	
Amplitude balance ( S <sub>21</sub> /S <sub>31</sub>  )	925-960	-1.0	-0.3/+0.4	+1.0	dB	
Phase balance (∠S <sub>21</sub> -∠S <sub>31</sub> )+180)	925-960	-10	-3/+2	+10	deg	
Input impedance (Unbalanced)		50			Ohm	
Output impedance (Balanced)		150//82nH			Ohm	
Operating temperature		-30 to +85			°C	

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



MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

Table 2.Electrical specifications(Filter 2)

Pass Band (1805-1880MHz)						
Item	Condition (MHz)	Specification			Unit	Remark
		Min.	Typ.	Max.		
Insertion Loss	1805-1880	-	1.6	2.5	dB(*1)	
Ripple	1805-1880	-	0.5	1.3	dB	
Input VSWR	1805-1880	-	1.9	2.3	-	
Output VSWR	1805-1880	-	1.8	2.3	-	
Absolute attenuation	DC-1300	35	47	-	dB	
	1300-1705	28	40	-	dB	
	1705-1785	10	16	-	dB	
	1920-1980	18	21	-	dB	
	1980-3000	20	23	-	dB	
	3000-5000	35	48	-	dB	
Absolute attenuation	5000-6000	30	38	-	dB	
Amplitude balance ( S21/S31 )	1805-1880	-1.4	-0.3/+0.7	+1.4	dB	
Phase balance (( $\phi$ S21- $\phi$ S31)+180)	1805-1880	-11	-2/+3	+11	deg	
Input impedance (Unbalanced)		50			Ohm	
Output impedance (Balanced)		150//15nH			Ohm	
Operating temperature		-30 to +85			°C	

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



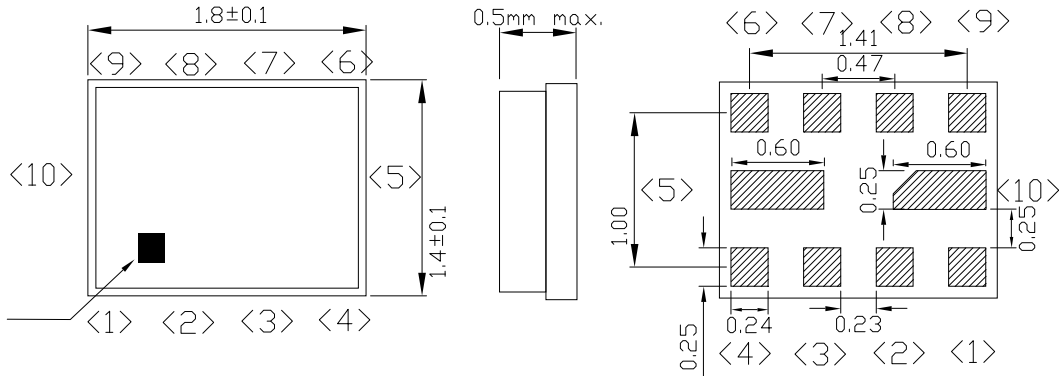
MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

**Dimensions**

Device size: 1.8typ. x 1.4typ. x 0.5max.



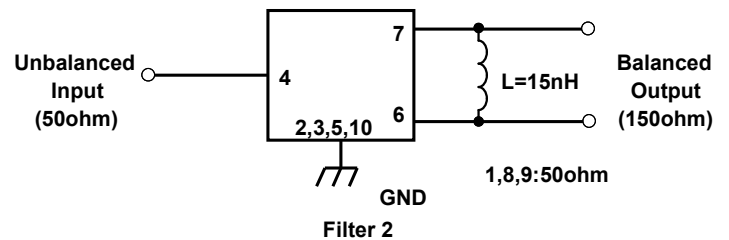
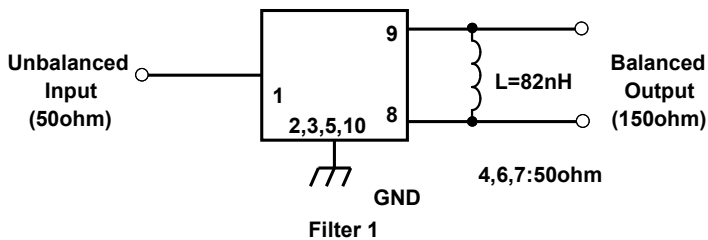
Unit: mm

**Pin Configuration**

Pin No.	Pin name	Description
1	IN	Filter1 input pin
2	GND	Ground
3	GND	Ground
4	IN	Filter2 input pin
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	925 ~ 960	GSM900-Rx
2	1805 ~ 1880	GSM1800-Rx

**Evaluation Circuit**





MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

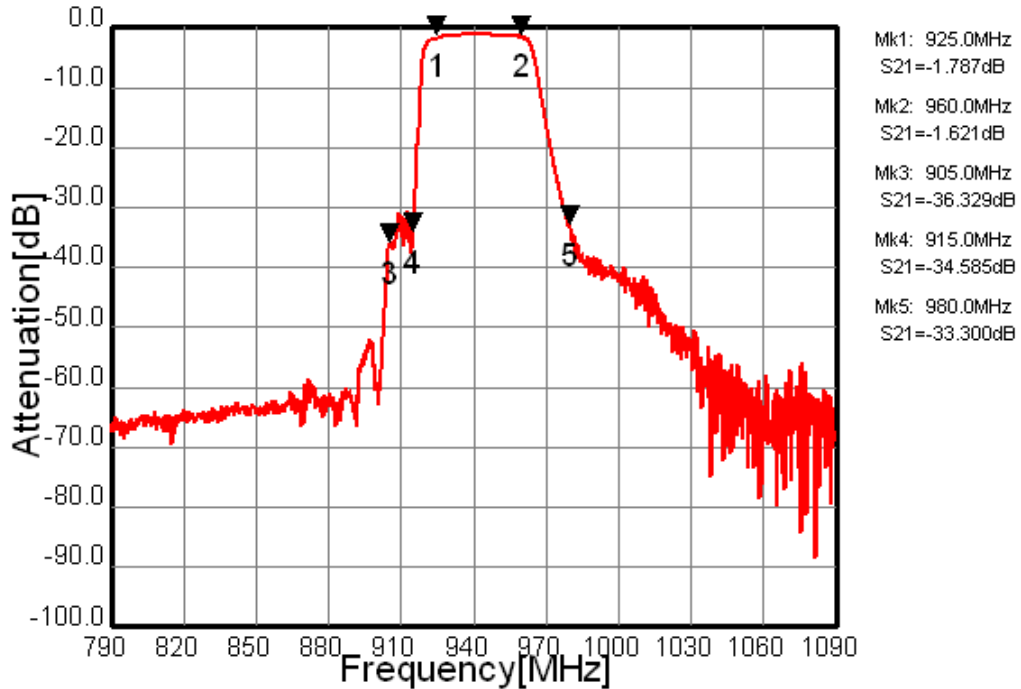


Fig.1 Pass-band Characteristic (Filter1)

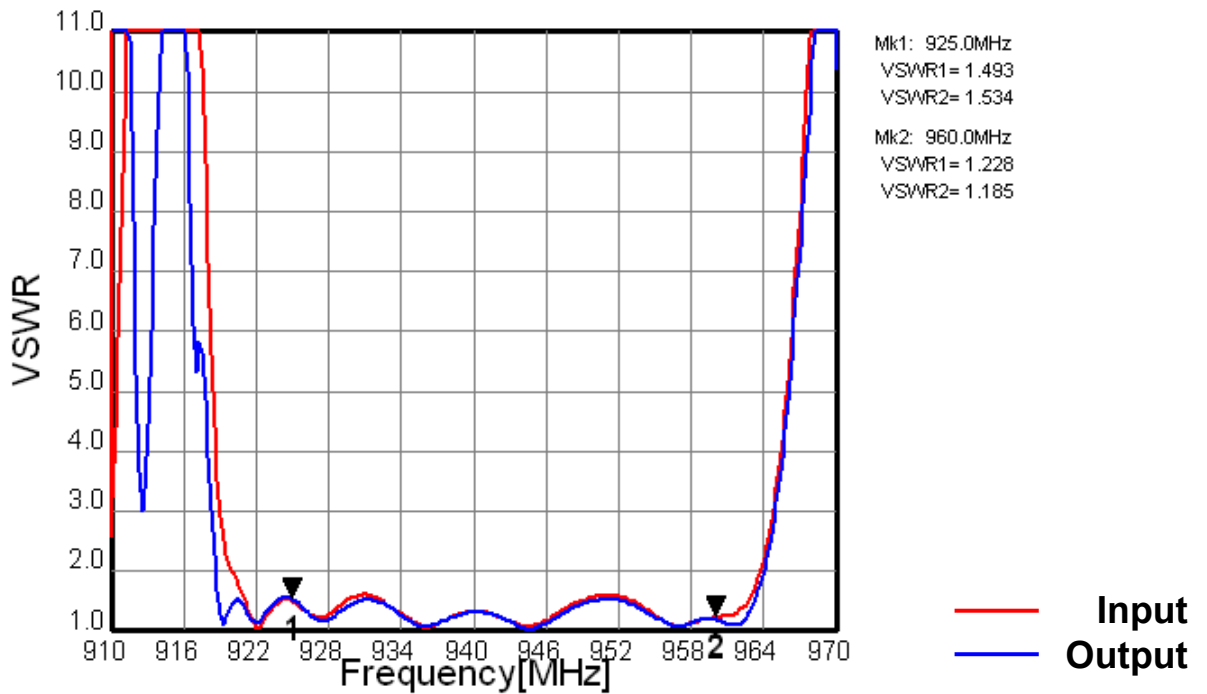


Fig.2 VSWR (Filter1)



MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

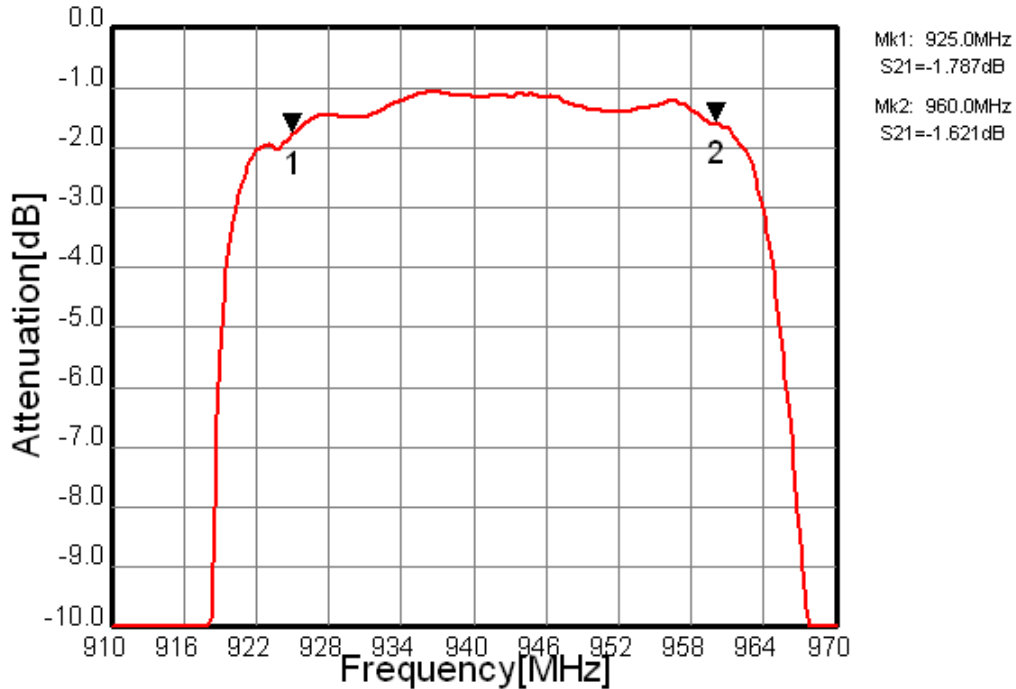


Fig.3 In-band Characteristic (Filter1)

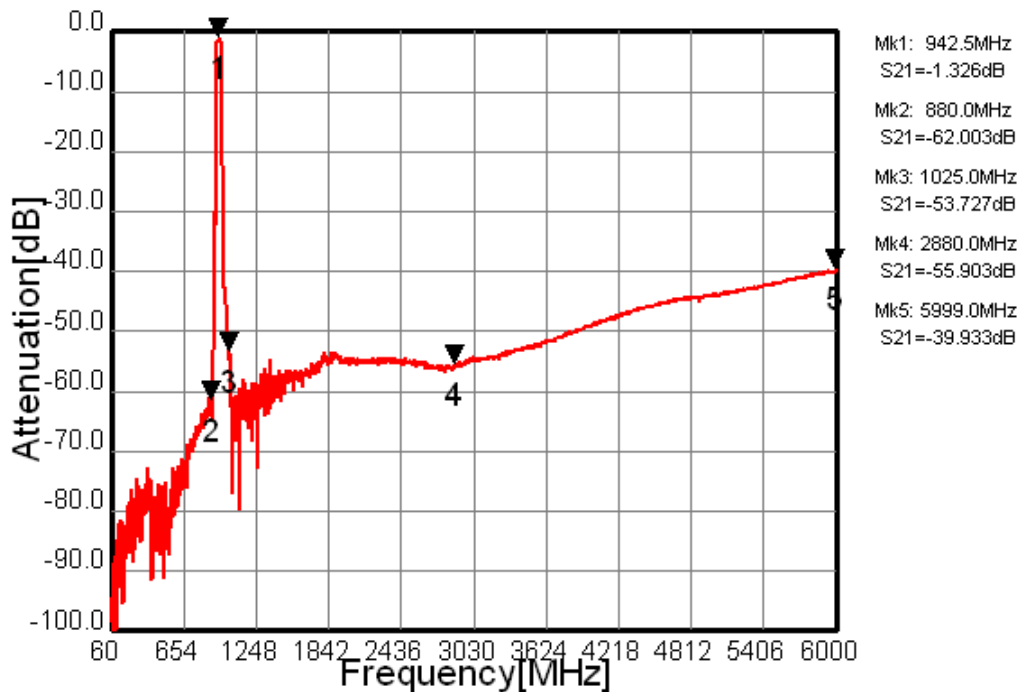


Fig.4 Wide-band Characteristic (Filter1)



MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

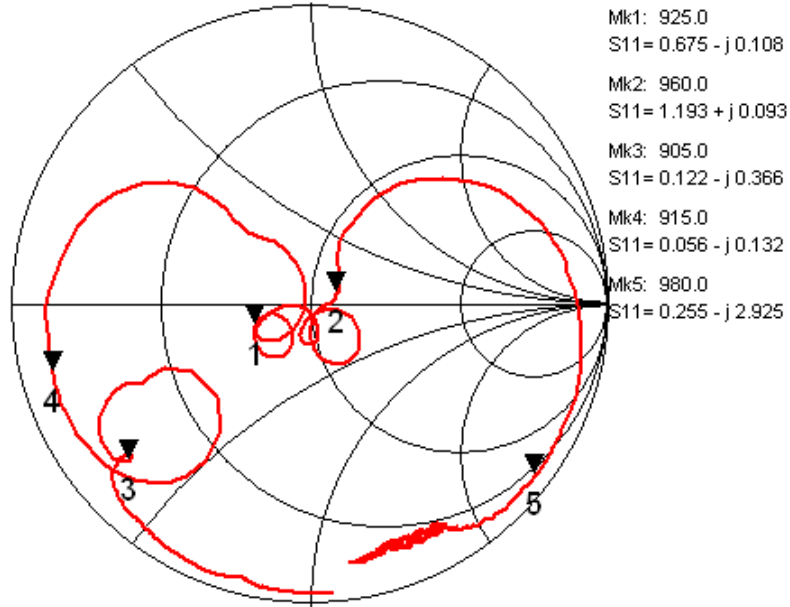


Fig.5 Impedance (S11) (Filter1)

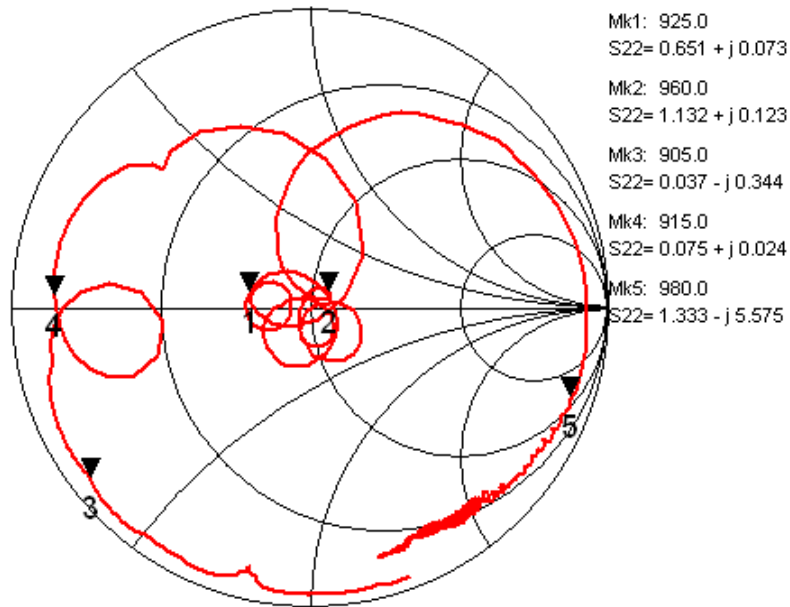


Fig.6 Impedance (S22) (Filter1)



MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

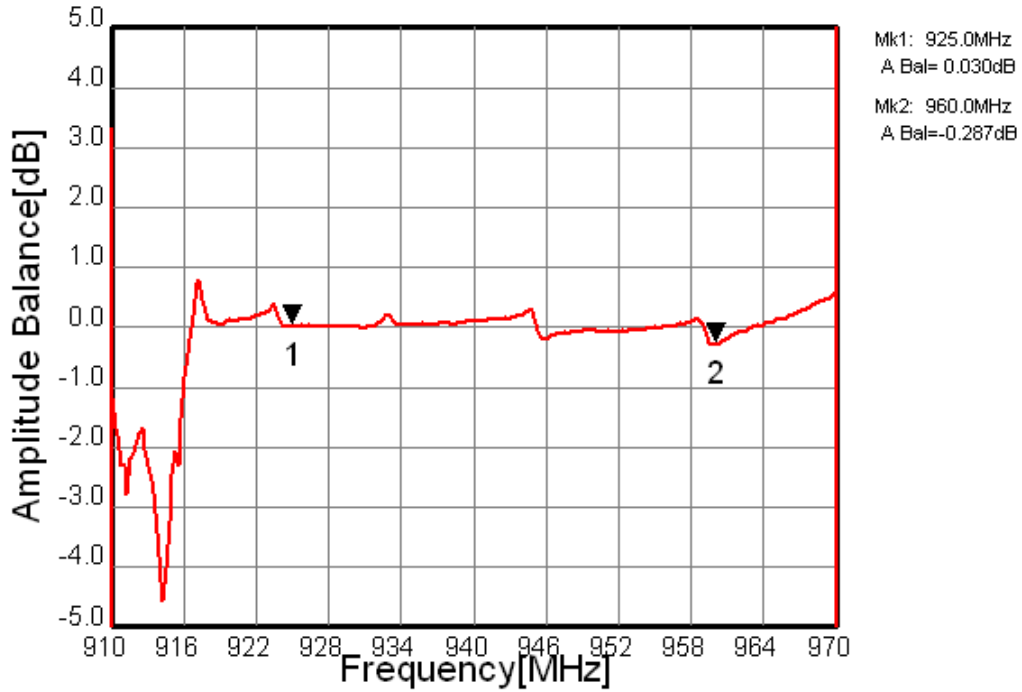


Fig.7 Amplitude Balance (Filter1)

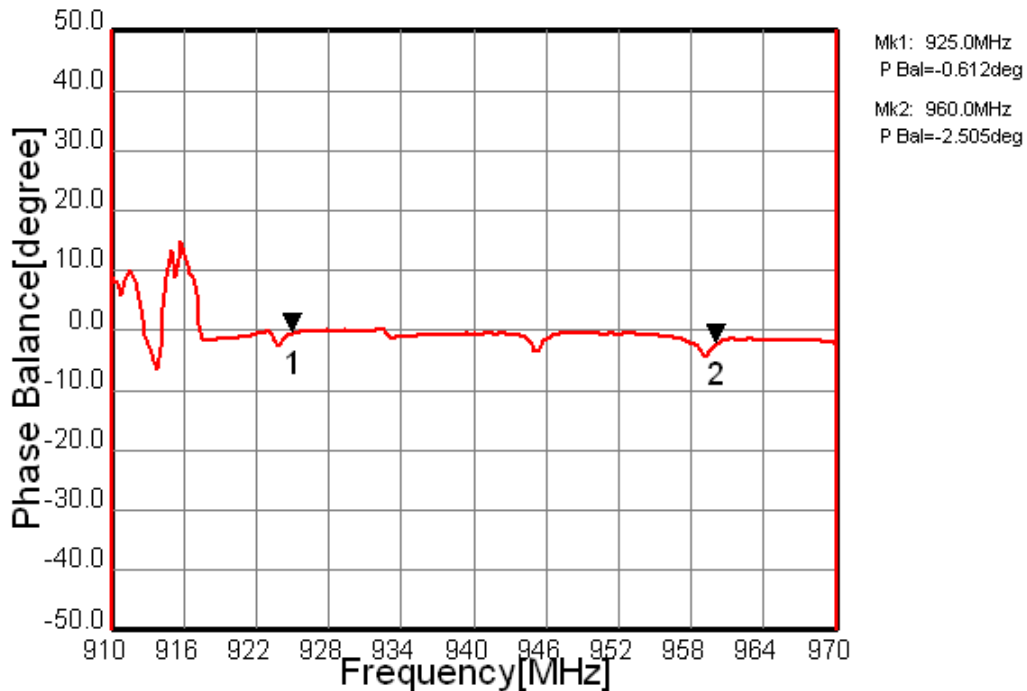


Fig.8 Phase Balance (Filter1)





MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

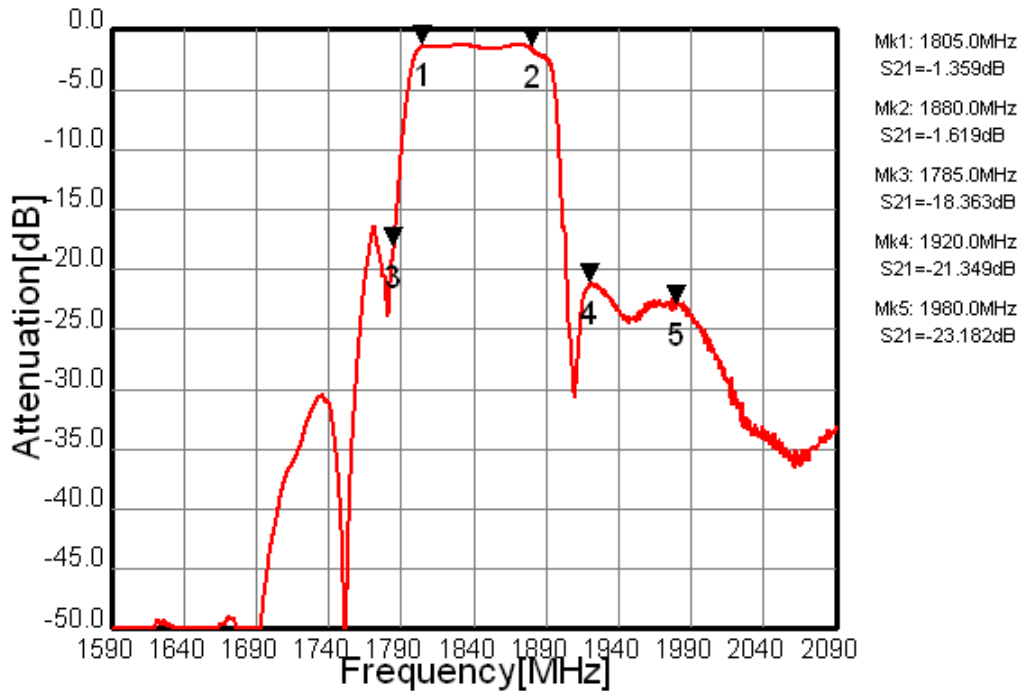


Fig.9 Pass-band Characteristic (Filter2)

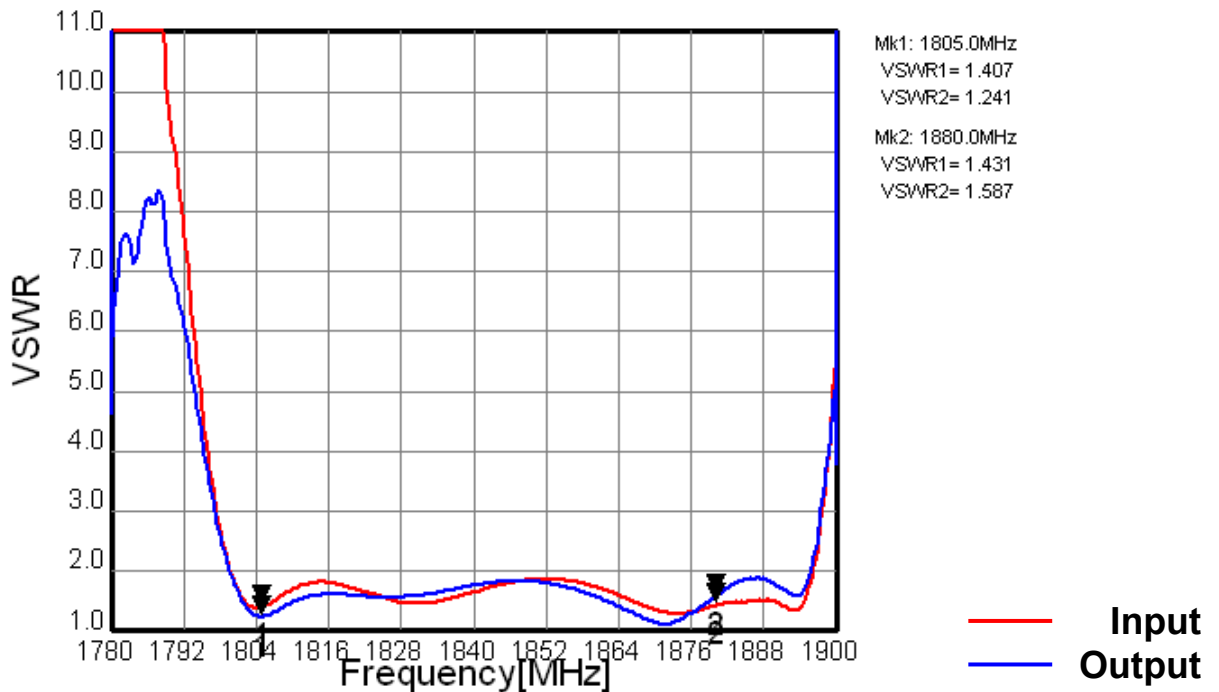


Fig.10 VSWR (Filter2)



MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

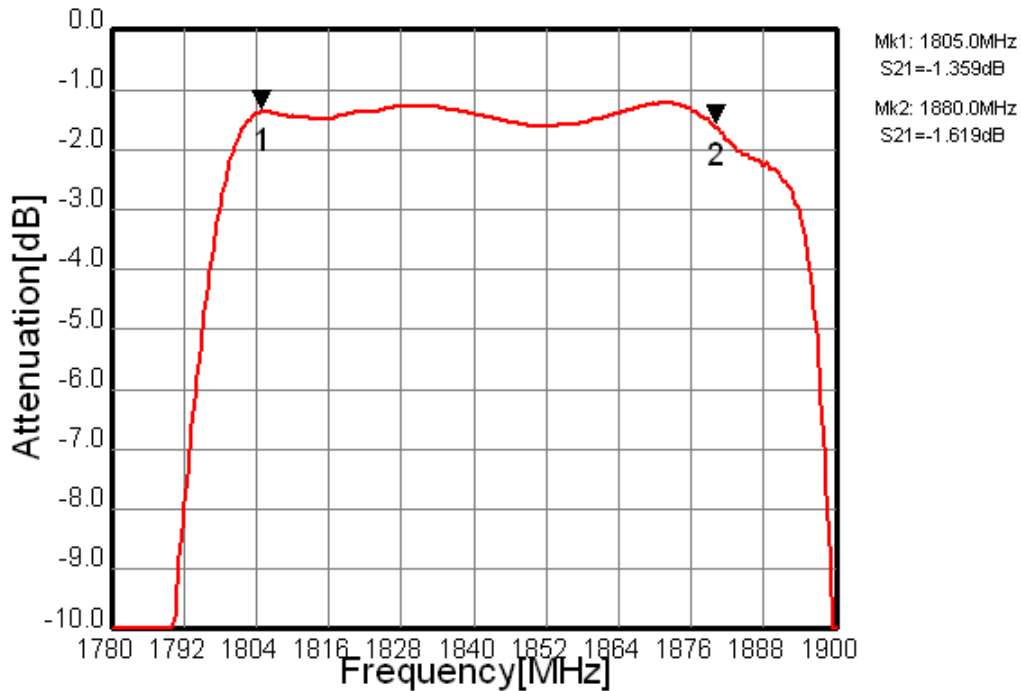


Fig.11 In-band Characteristic (Filter2)

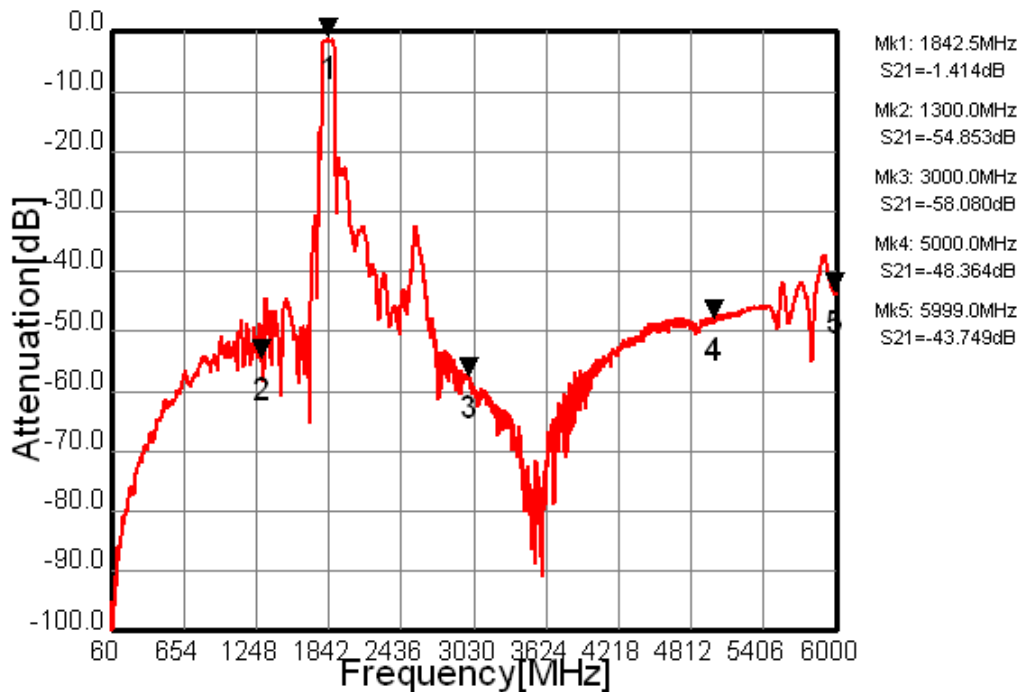


Fig.12 Wide-band Characteristic (Filter2)



MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

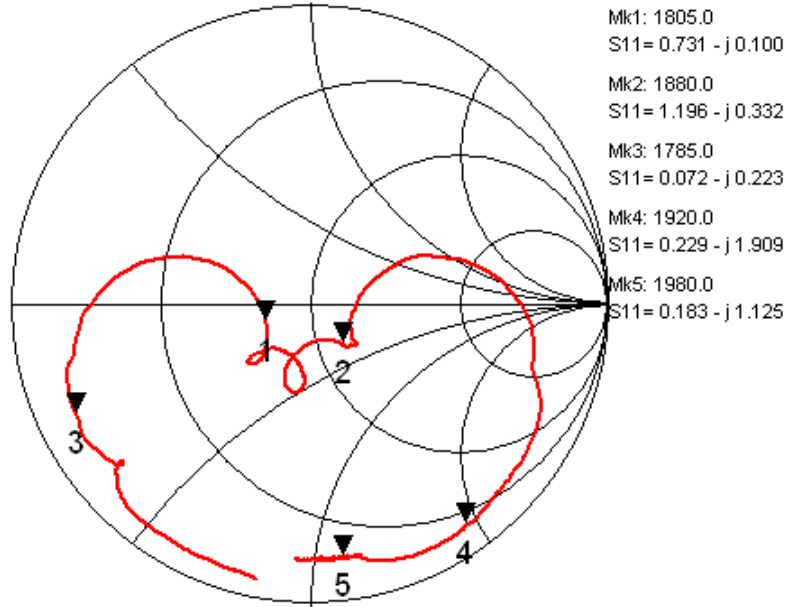


Fig.13 Impedance (S11) (Filter2)

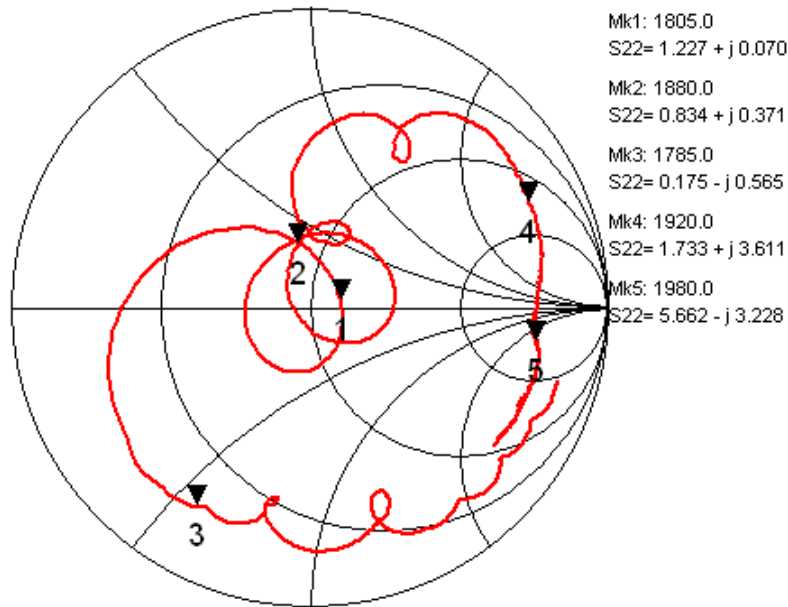


Fig.14 Impedance (S22) (Filter2)



MSL1

\* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/GSM1800 Rx (50/150ohms)	Date	March 31, 2010
Part Number	FAR-G6KZ-1G8425-Y4WZ	Version 2.0ab	

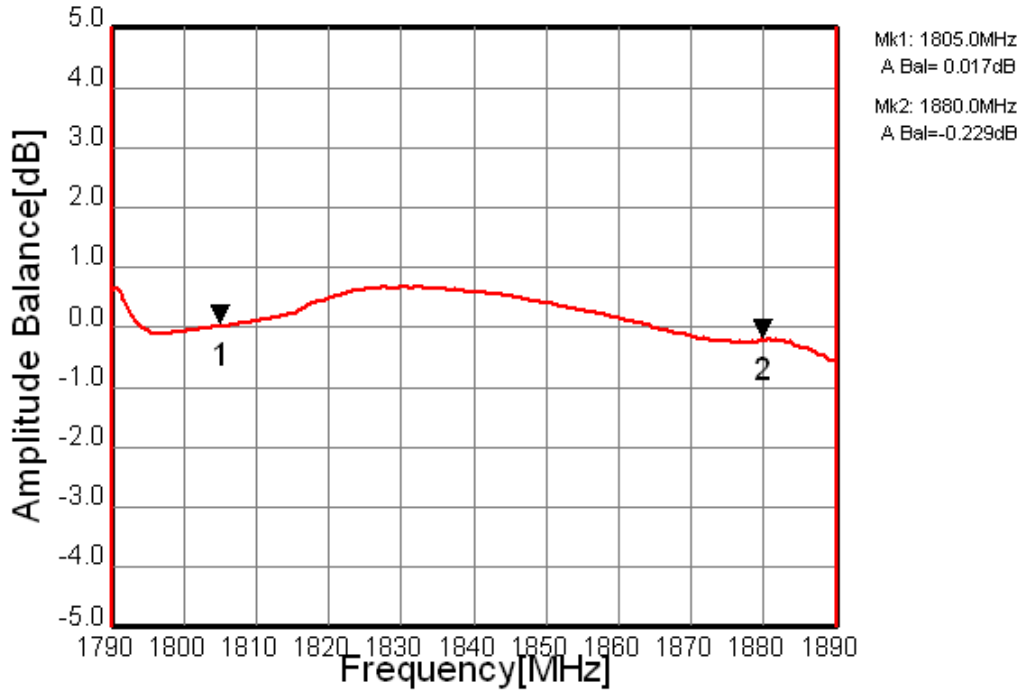


Fig.15 Amplitude Balance (Filter2)

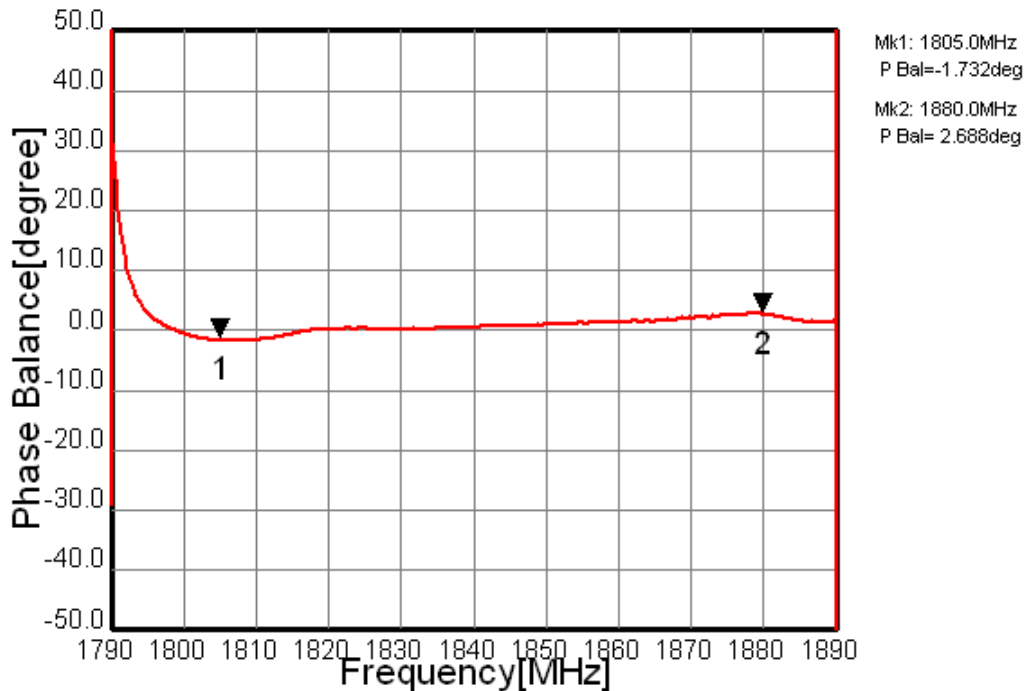


Fig.16 Phase Balance (Filter2)