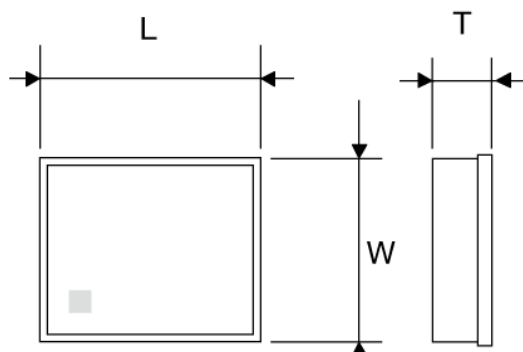


SAW Dual Filter

FAR-G5KT-942M50-Y4RZ



■ Features

- Item Summary
GSM900/850 , 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 / 850
Use	GSM
Transmitting / Receiving	Rx Dual Filter
Insertion Loss	2.2/1.9dB
Attenuation	25/52dB
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.



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

Table 1. Electrical specifications(Filter 1)

Pass Band (925-960MHz)						
Item	Condition (MHz)	Specification			Unit	Remarks
		Min.	Typ.	Max.		
Insertion Loss	925-960	-	2.2	3.1	dB(*)	
Ripple	925-960	-	0.8	1.7	dB	
Input VSWR	925-960	-	1.7	2.1	-	
Output VSWR	925-960	-	1.9	2.3	-	
Absolute attenuation	DC-880	40	45	-	dB	
	880-905	30	45	-	dB	
	905-915	18	25	-	dB	
	980-1025	25	30	-	dB	
	1025-2880	36	52	-	dB	
	2880-6000	25	38	-	dB	
Amplitude balance (S ₂₁ /S ₃₁)	925-960	-1.0	-0.2/+0.1	+1.0	dB	
Phase balance (∠S ₂₁ -∠S ₃₁)+180)	925-960	-10	0/+3.0	10	deg	
Input Power		-	-	13	dBm	
Input impedance (Unbalanced)		50//10nH			ohm	
Output impedance (Balanced)		150			ohm	
Operating temperature		-30 to +85			°C	

(*) Specification of insertion loss includes loss that comes from the test board.(0.05dB)



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
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Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

Table 2. Electrical specifications(Filter 2)

Pass Band (869-894MHz)						
Item	Condition (MHz)	Specification			Unit	Remarks
		Min.	Typ.	Max.		
Insertion Loss	869-894	-	1.9	2.6	dB(*1)	
Ripple	869-894	-	0.5	1.3	dB	
Input VSWR	869-894	-	1.7	2.1	-	
Output VSWR	869-894	-	1.7	2.1	-	
Absolute attenuation	DC-824	45	53	-	dB	
	824-849	40	52	-	dB	
	914-960	25	35	-	dB	
	960-2000	34	46	-	dB	
	2000-6000	25	35	-	dB	
Amplitude balance ((S21/S31))	869-894	-1.0	-0.1/+0.2	+1.0	dB	
Phase balance ((Φ S21- Φ S31)+180)	869-894	-10	0/+2	10	deg	
Input Power		-	-	13	dBm	
Input impedance (Unbalanced)		50//10nH			ohm	
Output impedance (Balanced)		150			ohm	
Operating temperature		-30 to +85			°C	

(*1) Specification of insertion loss includes loss that comes from the test board.(0.05dB)



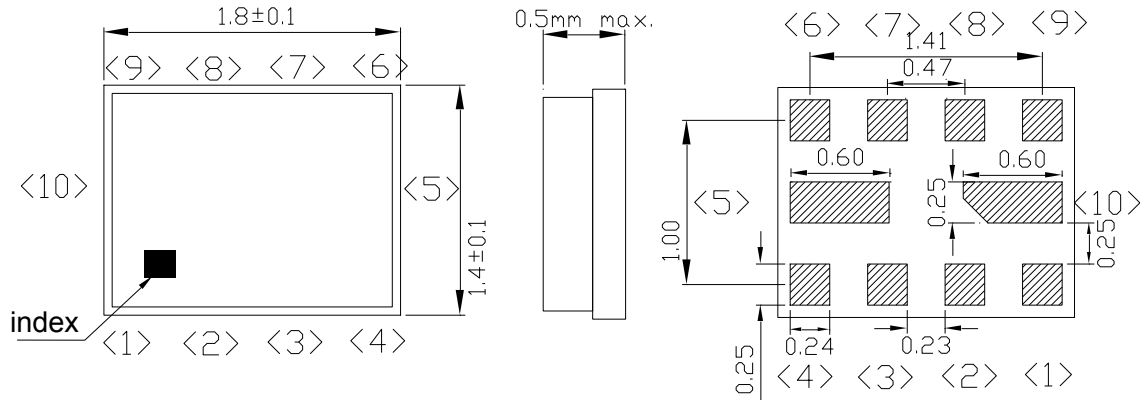
MSL1

* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

Dimensions

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



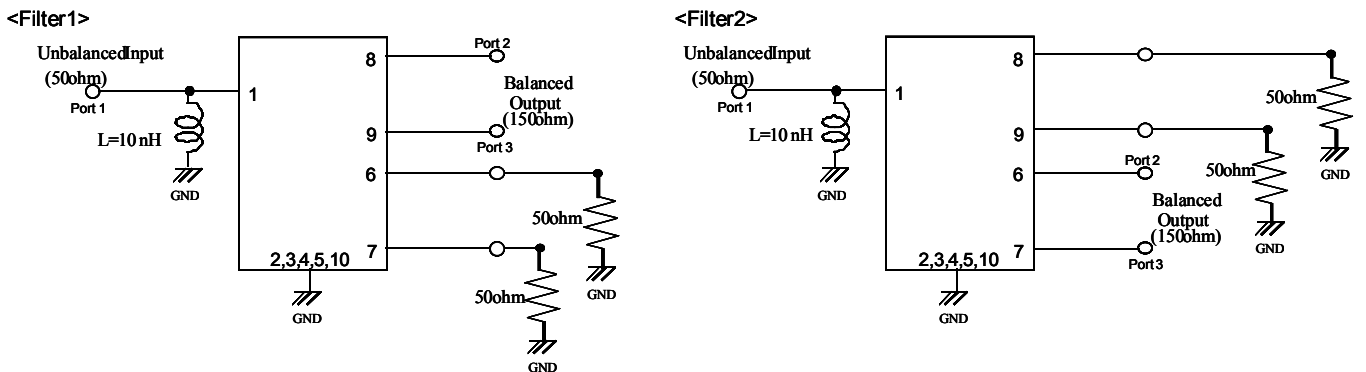
Unit : mm

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	925 ~ 960	GSM900-Rx
2	869 ~ 894	GSM850-Rx

Evaluation Circuit





* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

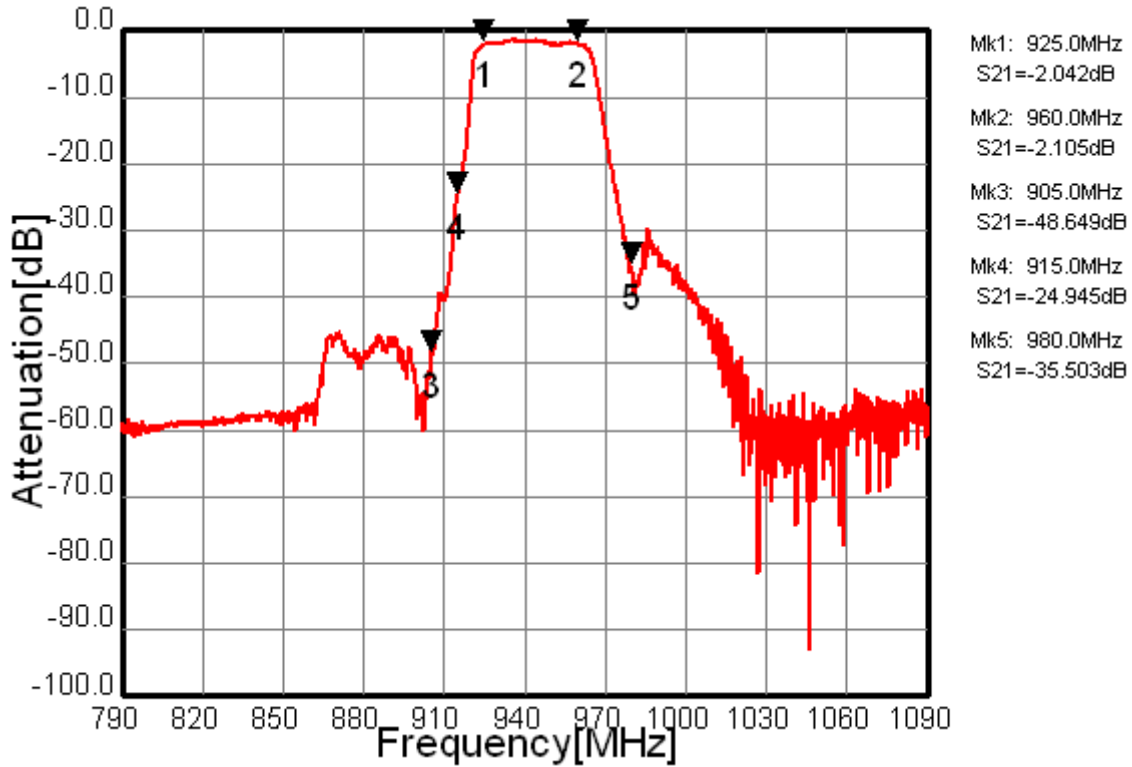


Fig.1 Pass-band Characteristic (Filter1)

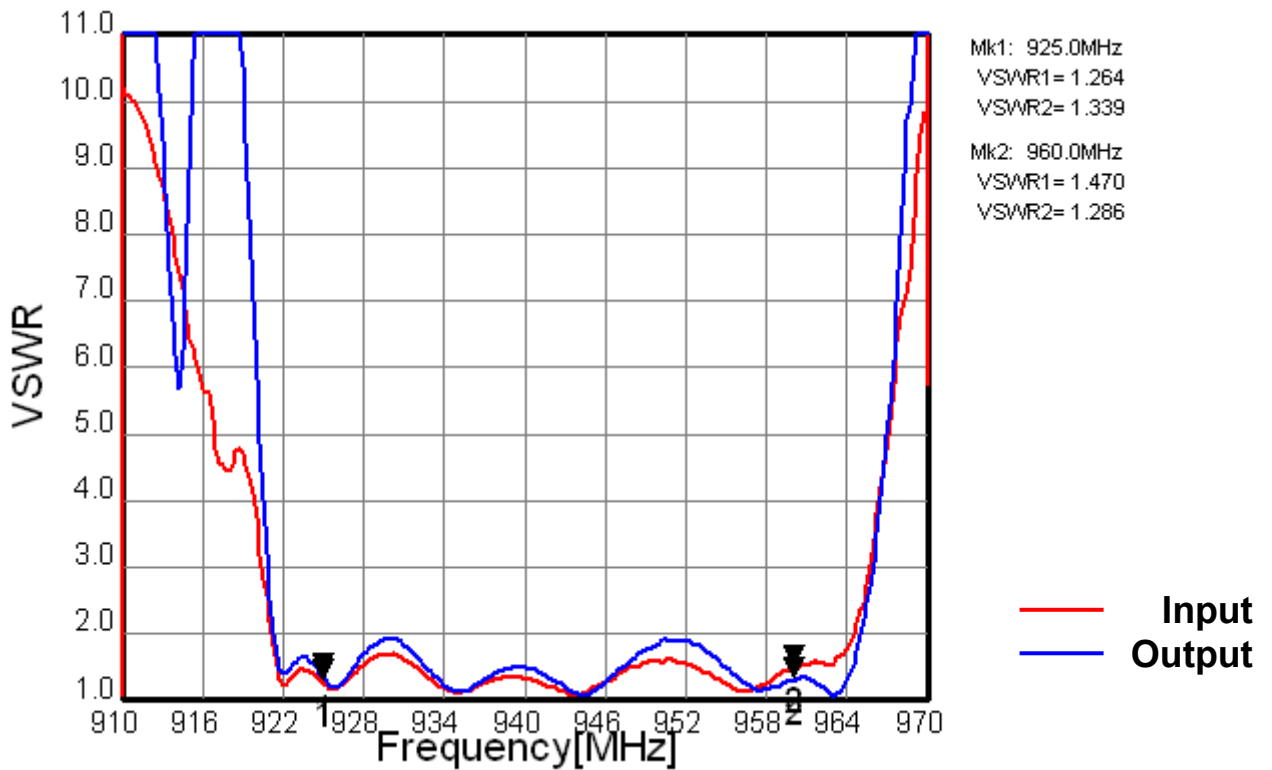


Fig.2 VSWR (Filter1)

TAIYO YUDEN



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

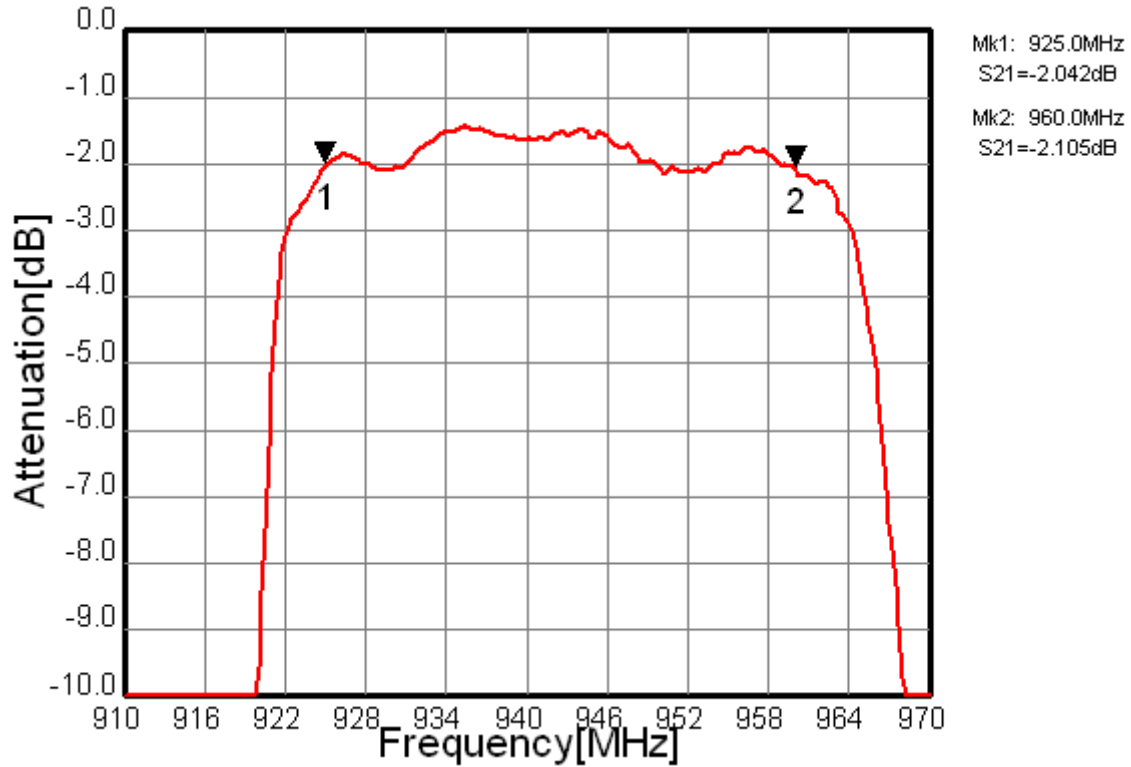


Fig.3 In-band Characteristic (Filter1)

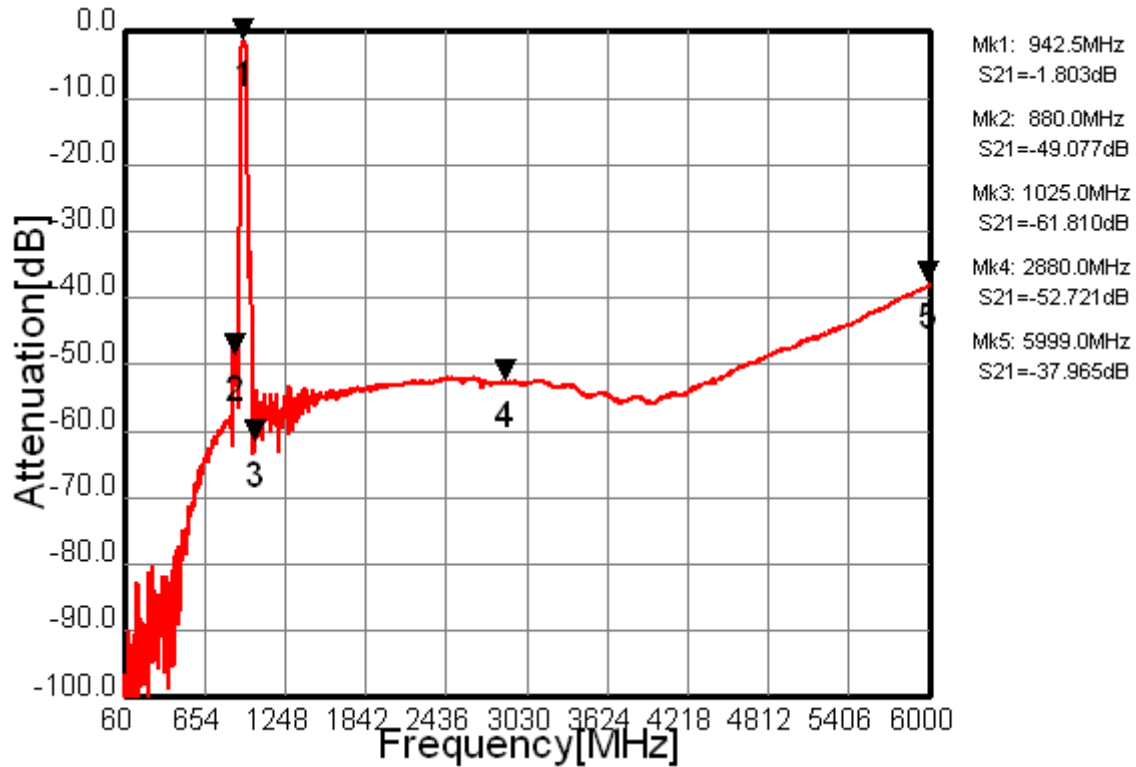


Fig.4 Wide-band Characteristic (Filter1)

TAIYO YUDEN



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

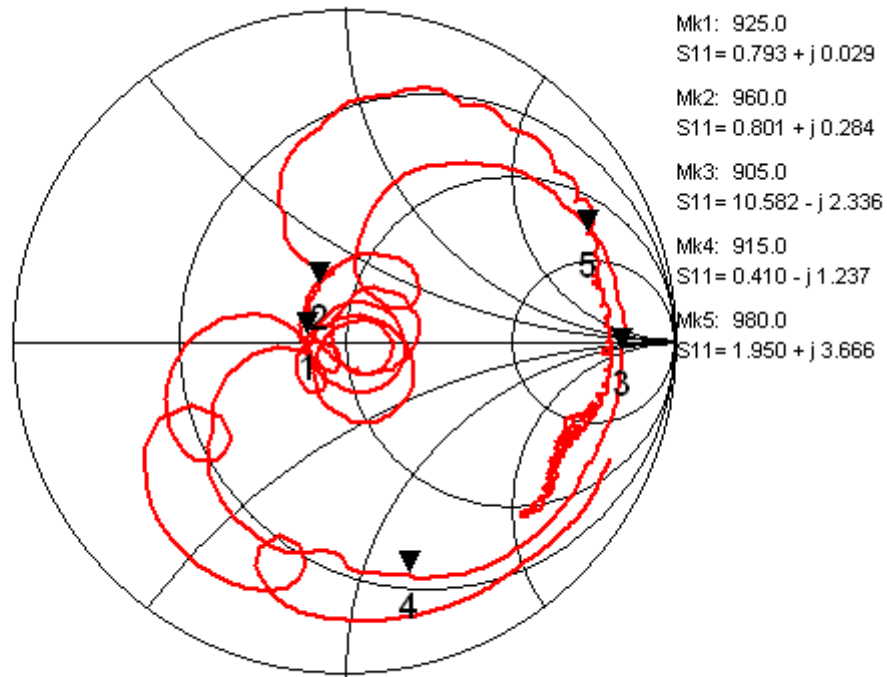


Fig.5 Impedance (SS11) (Filter1)

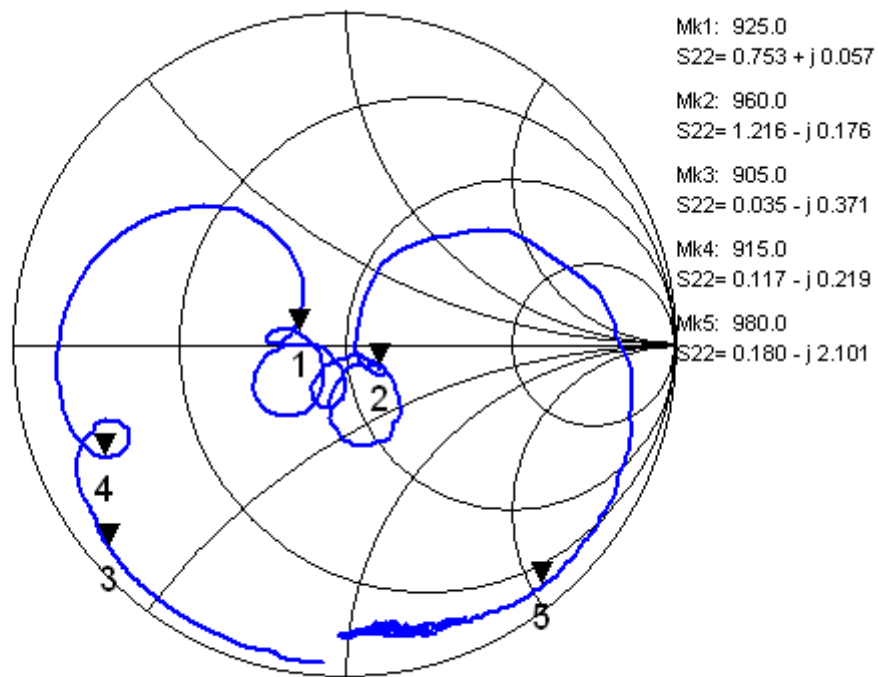


Fig.6 Impedance (SS22) (Filter1)



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

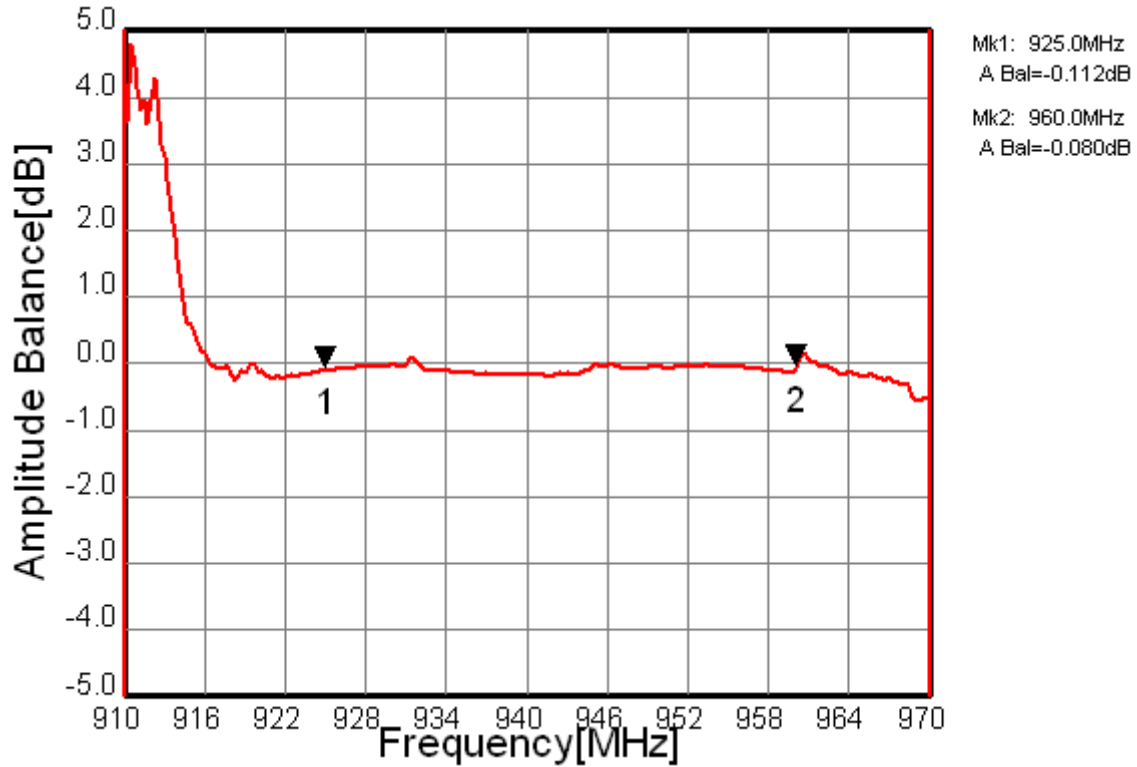


Fig.7 Amplitude Balance (Filter1)

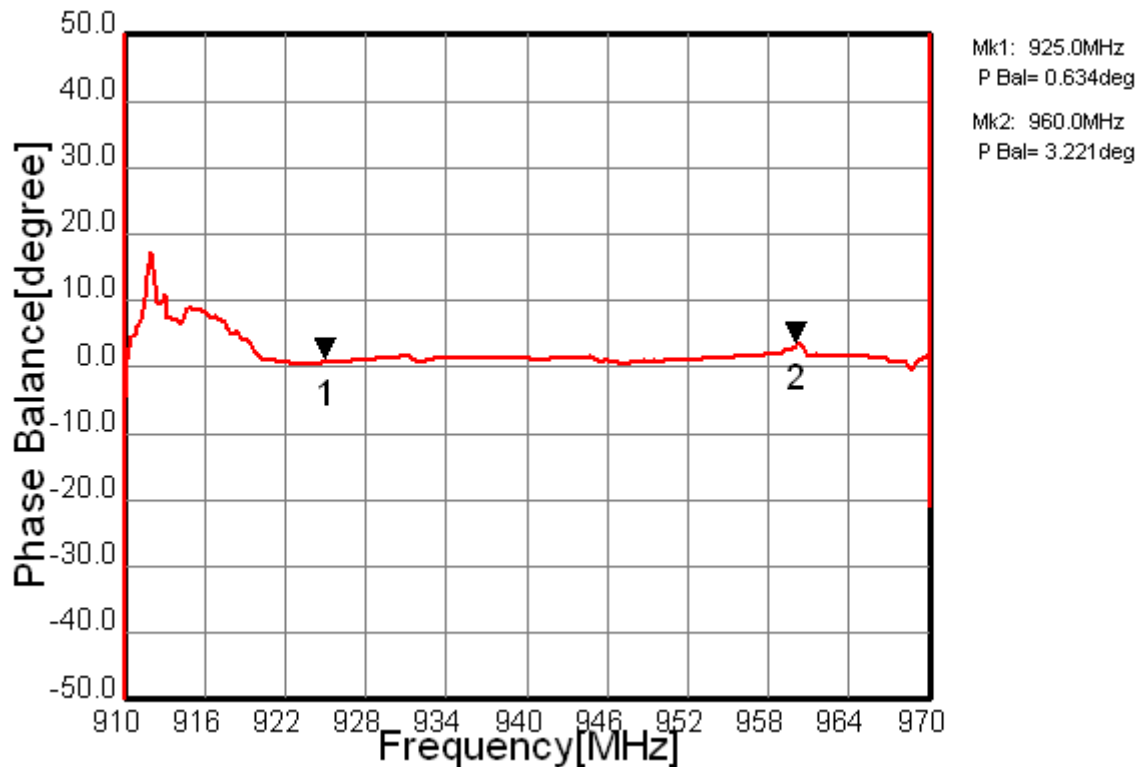


Fig.8 Phase Balance (Filter1)



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

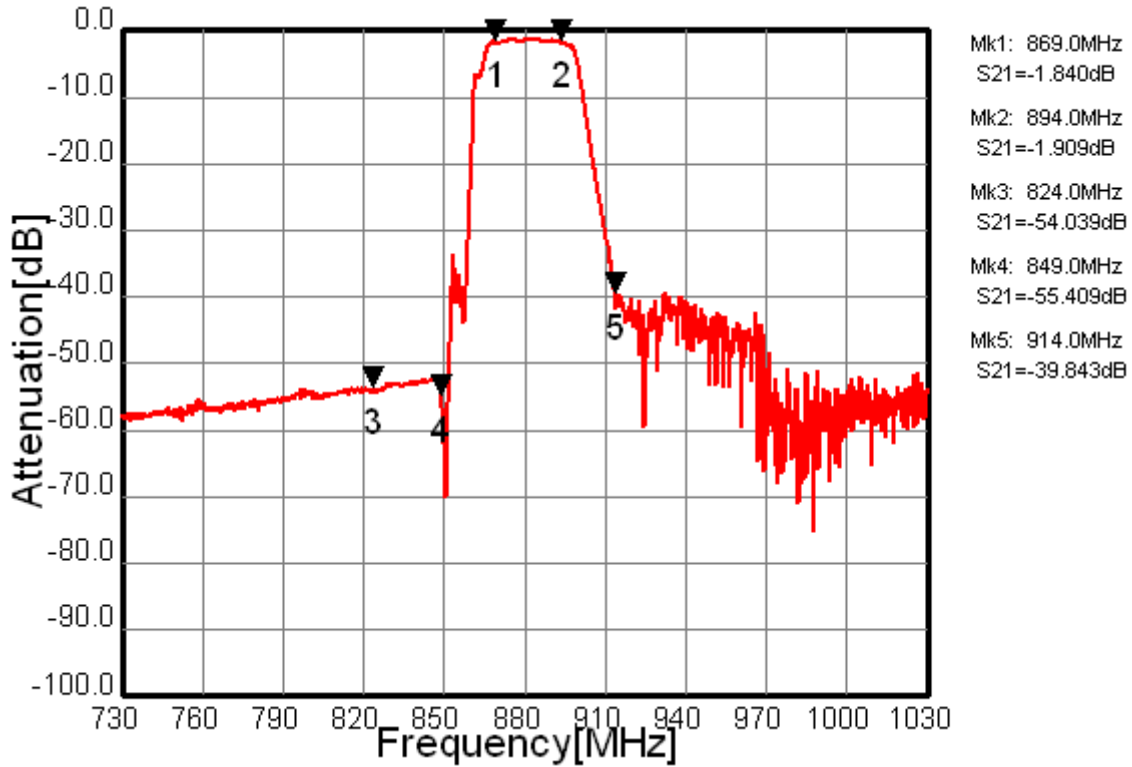


Fig.9 Pass-band Characteristic (Filter2)

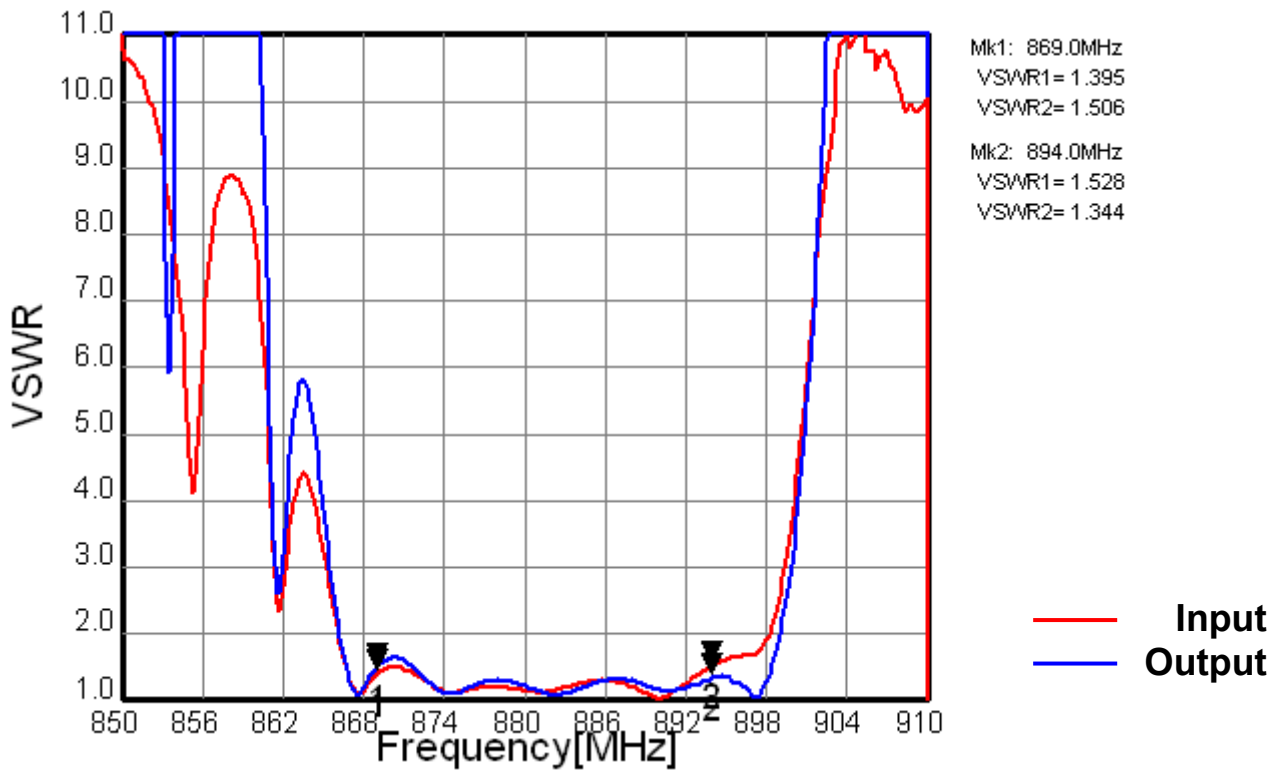


Fig.10 VSWR (Filter2)



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

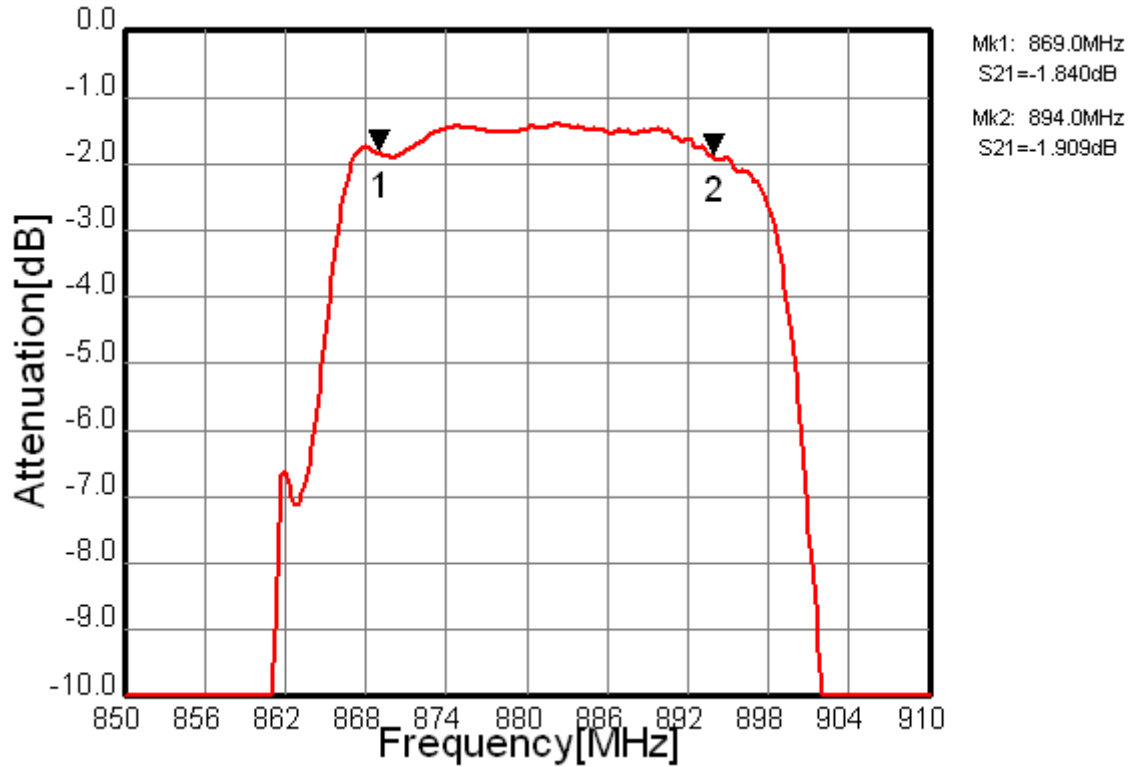


Fig.11 In-band Characteristic (Filter2)

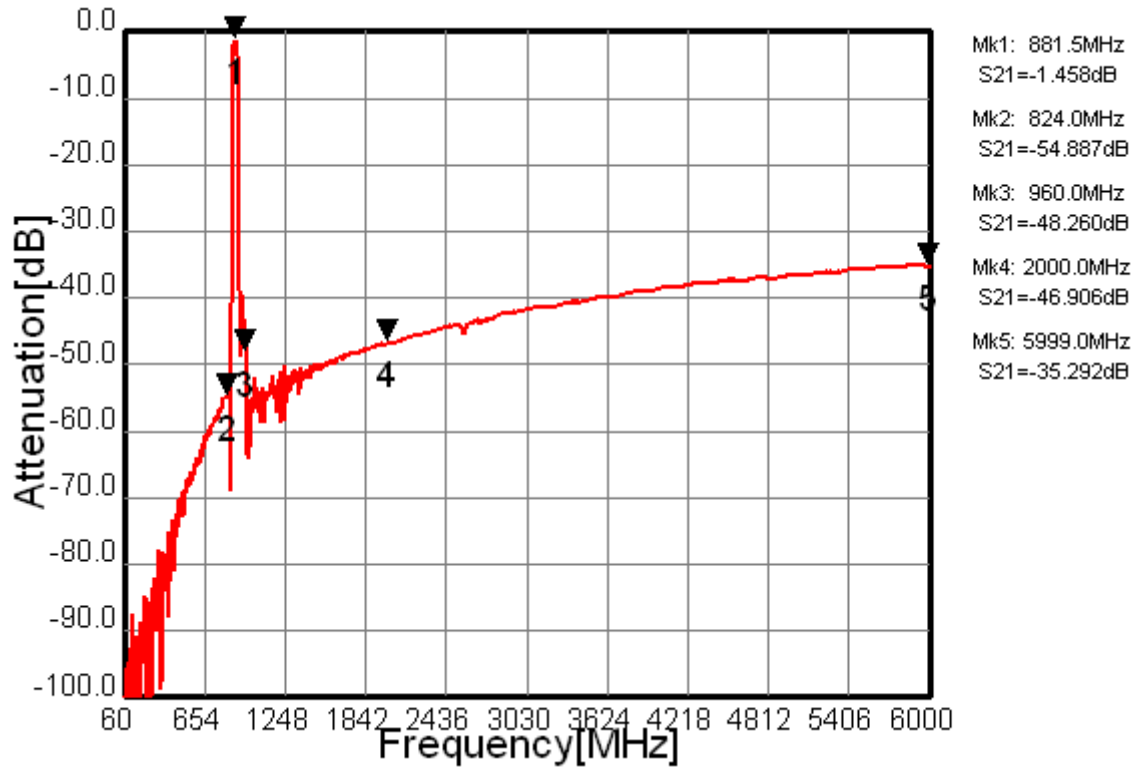


Fig.12 Wide-band Characteristic (Filter2)



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

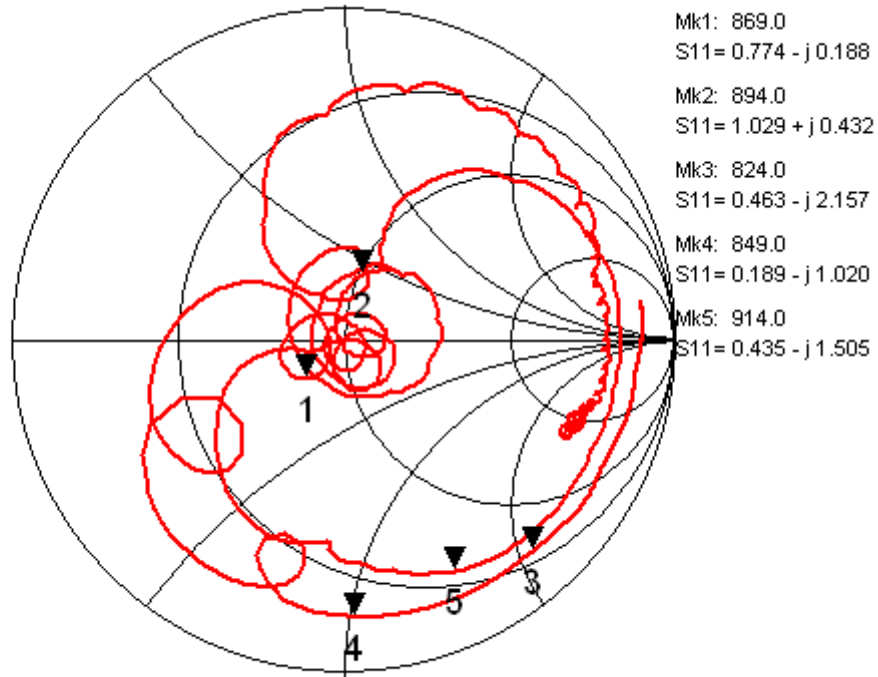


Fig.13 Impedance (SS11) (Filter2)

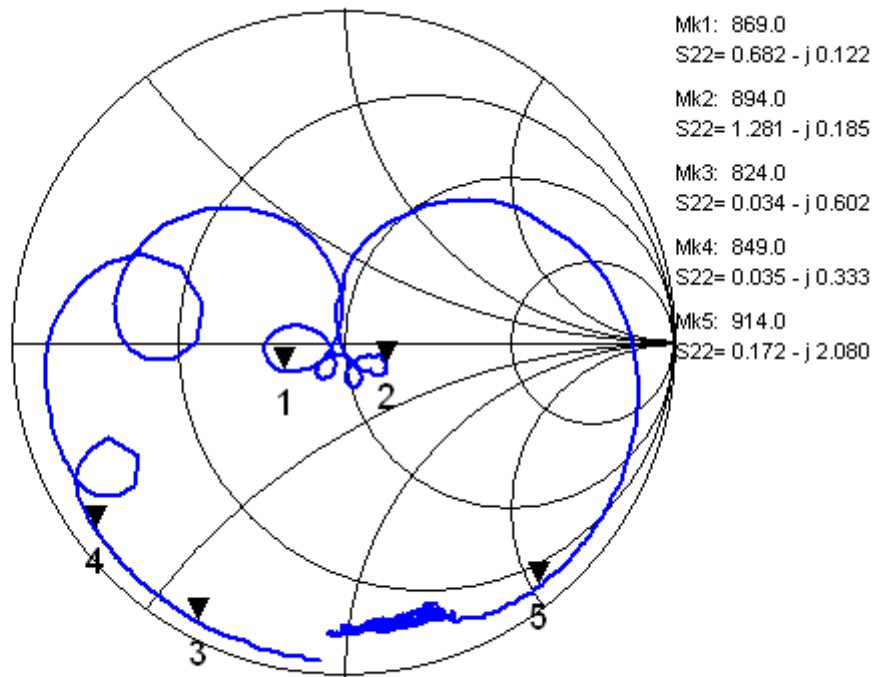


Fig.14 Impedance (SS22) (Filter2)



* Pb Free Part



MSL1

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM900/ GSM850 Rx (50/150ohms)	DATE	Aug. 19, 2010
Part Number	FAR-G5KT-942M50-Y4RZ	Version 1.1aa	

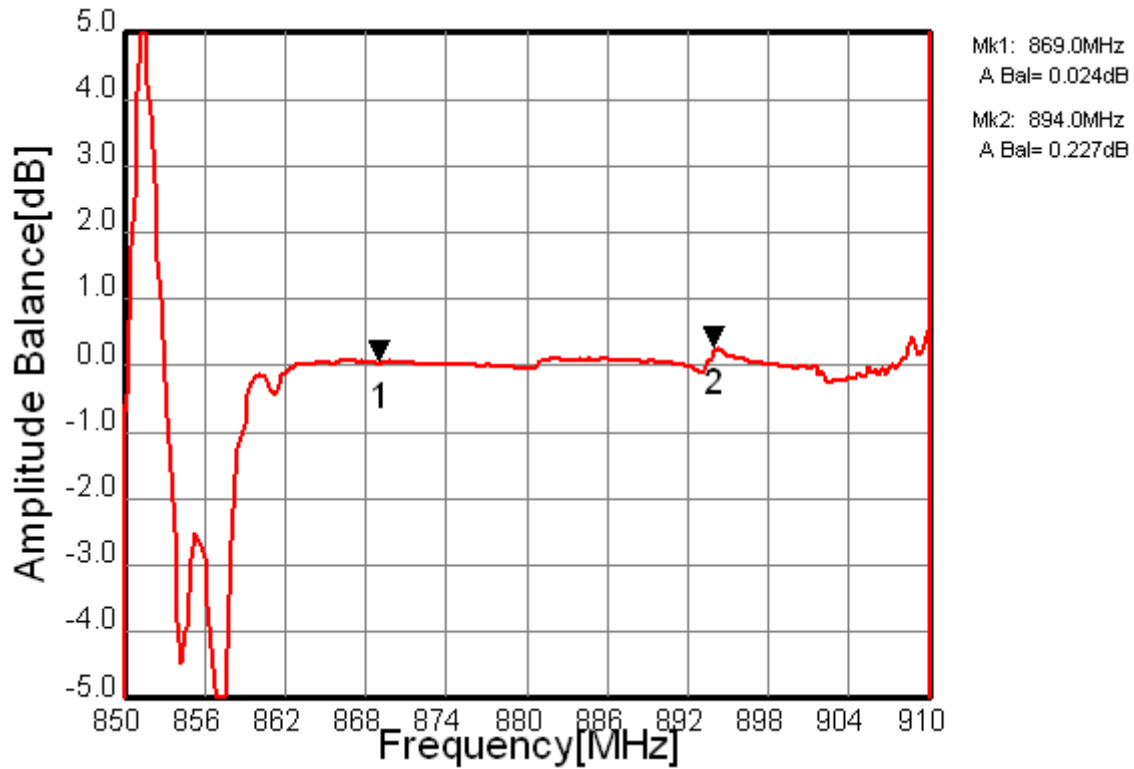


Fig.15 Amplitude Balance (Filter2)

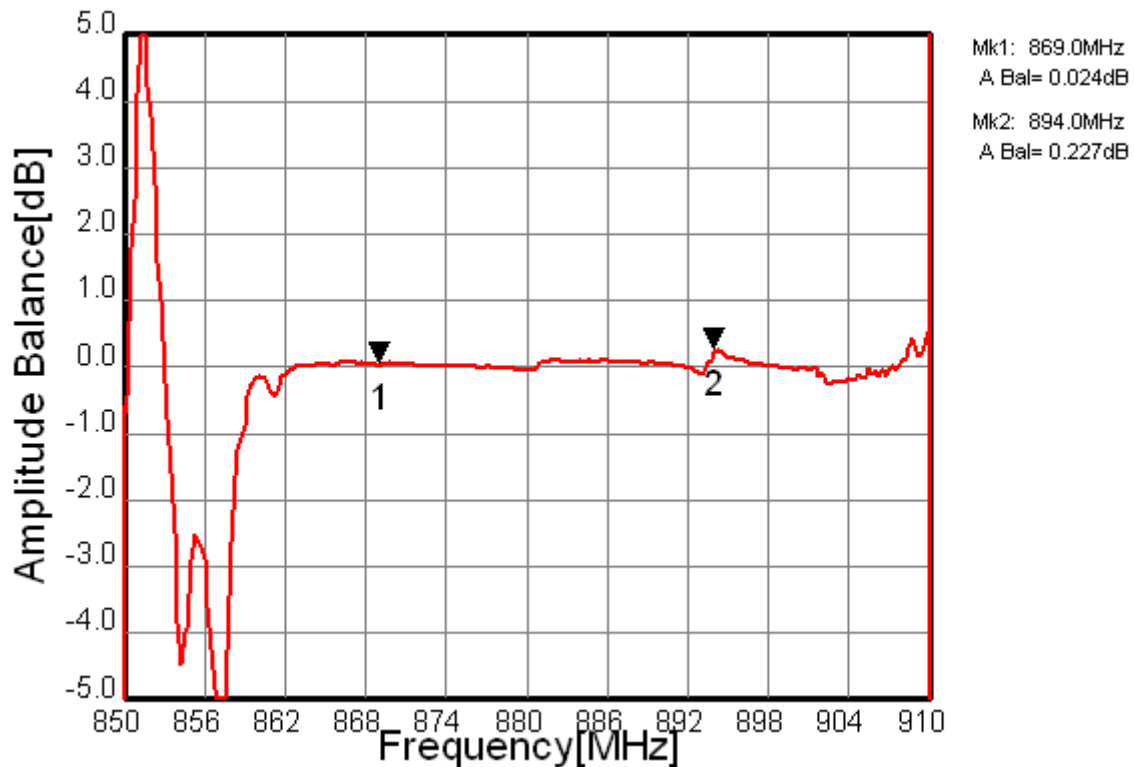


Fig.16 Phase Balance (Filter2)