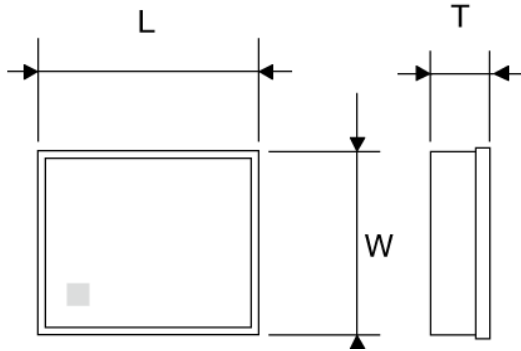


# SAW Filter

## FAR-F6KB-1G8425-B4GA



### ■ Features

- Item Summary  
DCS , Rx, 504
- Lifecycle Stage  
Mass Production
- Standard packaging quantity (minimum)  
Taping Embossed 3000 , 15000pcs

### ■ Products characteristics table

Temperature Range	-30 to +85°C
Use	GSM
Transmitting / Receiving	Rx Filter
Insertion Loss	1.5dB
Attenuation	14dB
RoHS Compliance	Yes
Halogen Free	Yes
Soldering Method	Reflow

### ■ External Dimensions

L	1.4mm +0.1:-0.1
W	1.0mm +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	DCS-Rx (50/150ohm)	Date	March 31, 2010
Part Number	FAR-F6KB-1G8425-B4GA	Version 8.0h	

Table 1. Electrical specifications

Passband: 1805 ~ 1880 MHz						
Item	Condition	Specification			Unit	Remarks
		Min.	Typ.	Max.		
Insertion Loss	1805~1880 MHz	-	1.5	2.2	dB	+25+/-2°C
		-	-	2.8	dB	
Ripple	1805~1880 MHz	-	0.4	1.8	dB	
Absolute attenuation	DC~1300 MHz	40	48	-	dB	
	1300~1705 MHz	28	37	-	dB	
	1705~1785 MHz	12	14	-	dB	+25+/-2°C
		10	-	-	dB	
	1920~1980 MHz	16	19	-	dB	
	1980~3000 MHz	20	22	-	dB	
	3000~5000 MHz	35	45	-	dB	
5000~6000 MHz	32	40	-	dB		
VSWR (Input)	1805~1880 MHz	-	1.8	2.5	-	
VSWR (Output)	1805~1880 MHz	-	1.7	2.4	-	
Amplitude Balance  S21 / S31	1805~1880 MHz	-1.4	-0.5/+0.5	+1.4	dB	
Phase Balance ( $\Phi$ S21- $\Phi$ S31)-180	1805~1880 MHz	-11	-6/+2	+11	deg.	
Input Impedance	Unbalanced	50			ohm	
Output Impedance	Balance	150//12nH			ohm	
Operating Temperature		-30 ~ +85			°C	
Device size		1.4typ.x1.0typ.x0.5max.			mm	



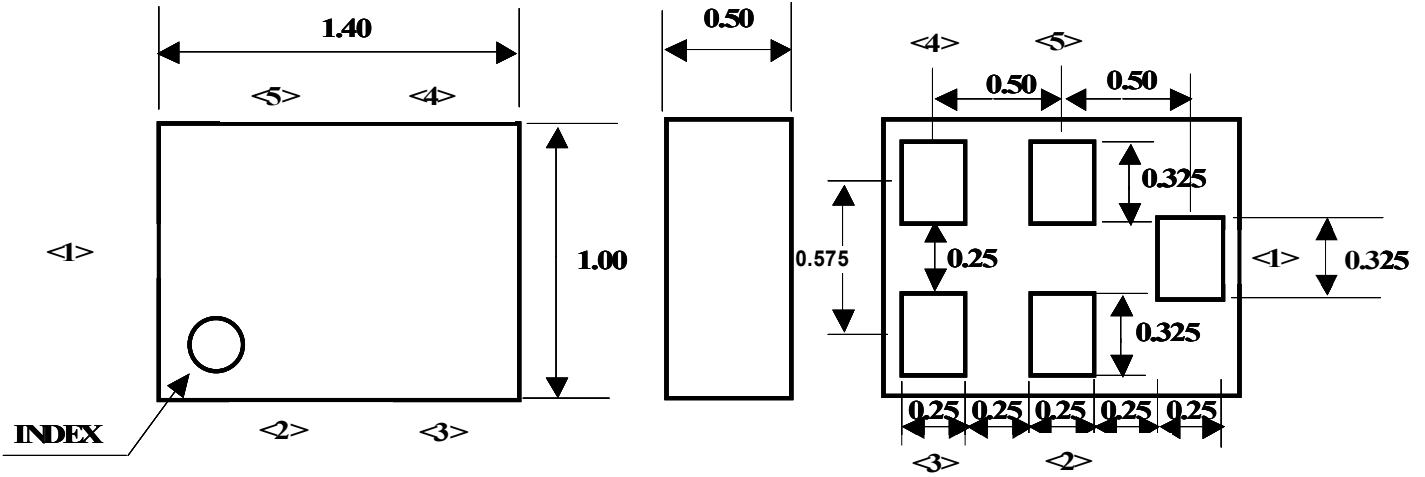
MSL1

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Part Number	FAR-F6KB-1G8425-B4GA	Version 8.0h	

**Dimension**

Device size: 1.4typ. x 1.0typ. x 0.5max.

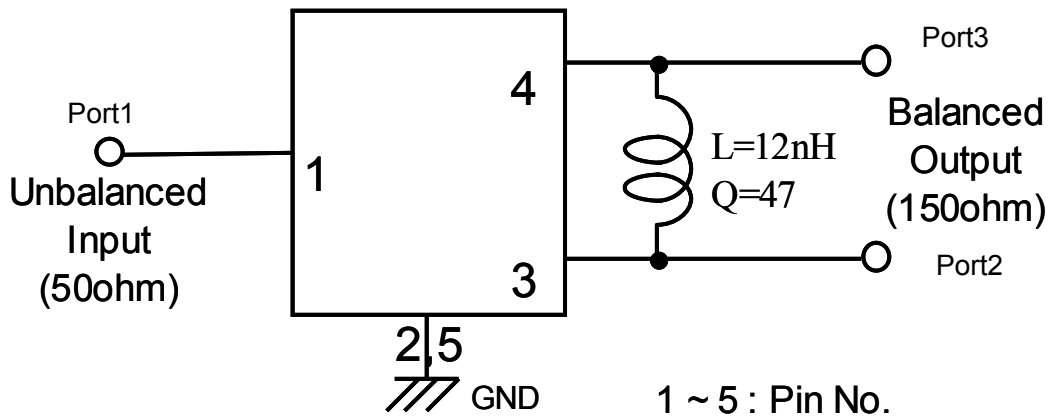


Unit: mm

**Pin Configuration**

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	OUT	Balanced pin
4	OUT	Balanced pin
5	GND	Ground

**Evaluation Circuit**





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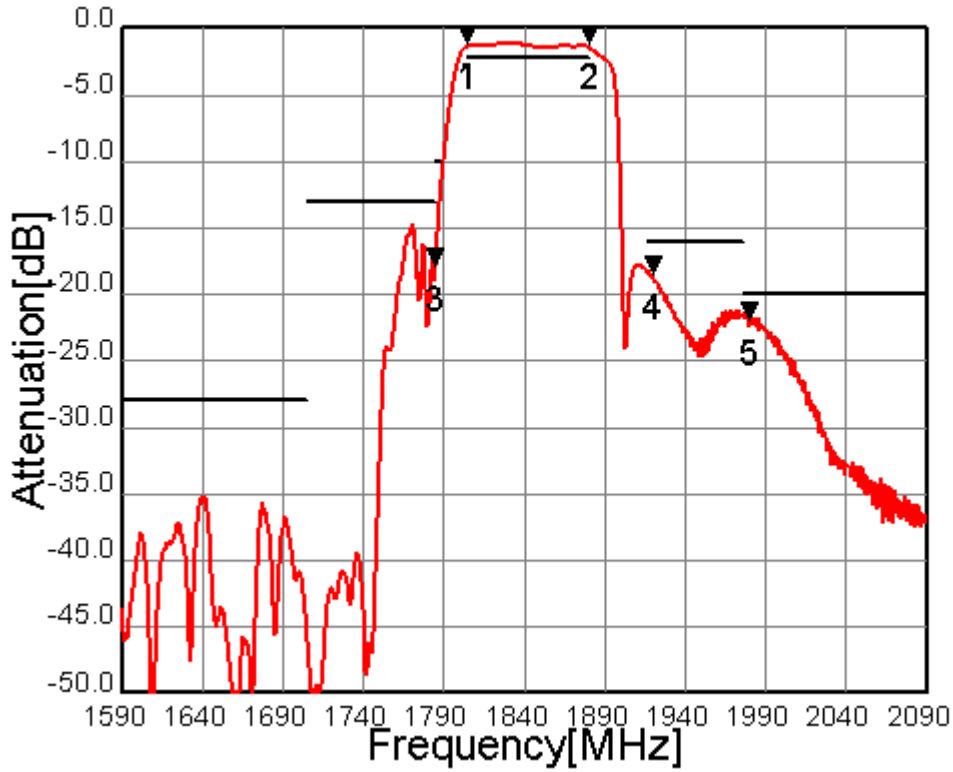


Fig.1 Pass-band Characteristic

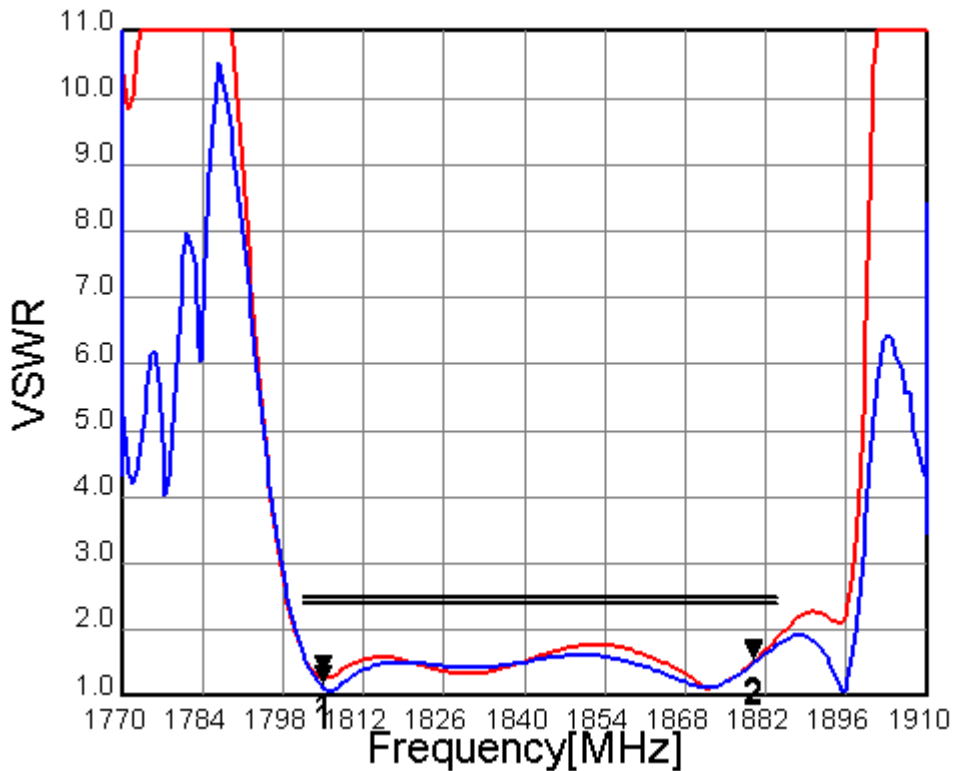


Fig.2 VSWR

— Input (Unbal.)  
— Output (Bal.)



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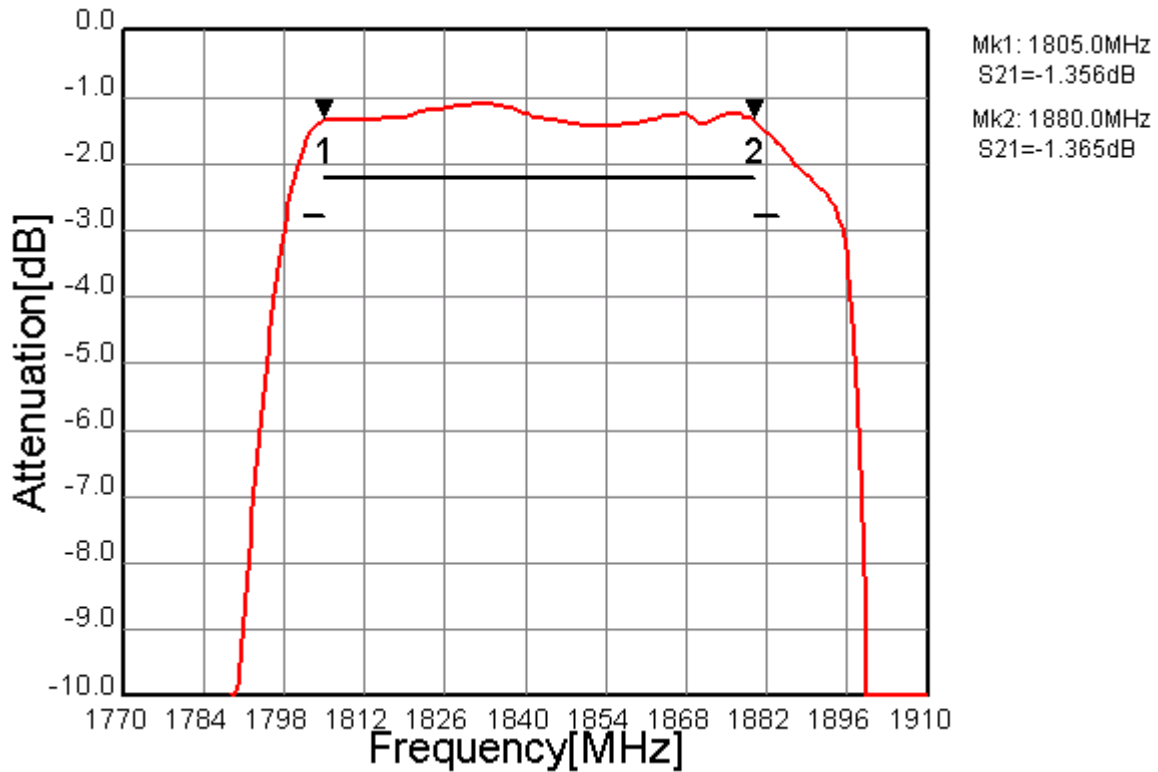


Fig.3 In-band Characteristic

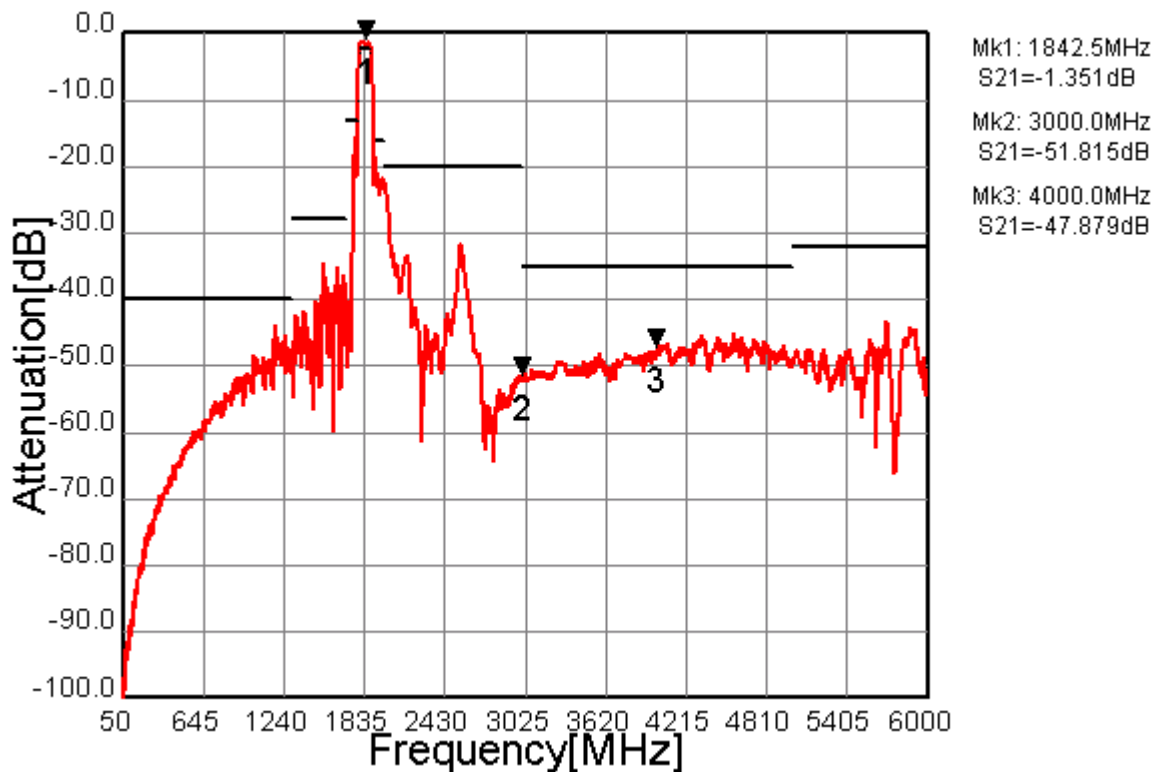


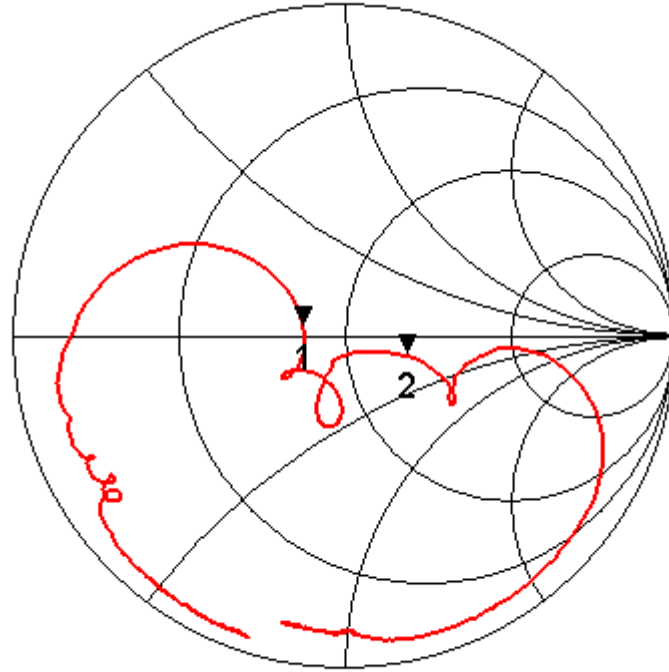
Fig.4 Wide-band Characteristic



MSL1

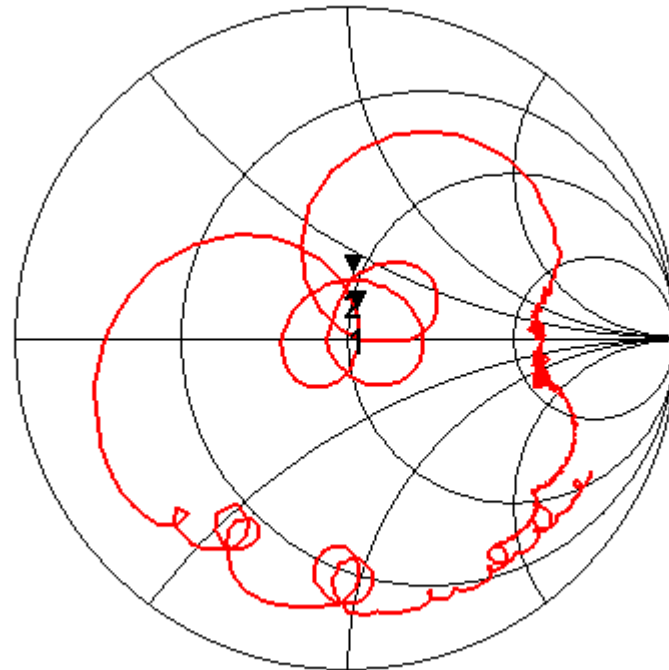
\* Pb Free Part

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System	DCS-Rx (50/150ohm)	Date	March 31, 2010
Part Number	FAR-F6KB-1G8425-B4GA	Version 8.0h	



Mk1: 1805.0  
 $S_{11} = 0.774 + j 0.047$   
 Mk2: 1880.0  
 $S_{11} = 1.450 - j 0.186$

Fig.5 Input Impedance (Unbalance)



Mk1: 1805.0  
 $S_{22} = 1.052 + j 0.170$   
 Mk2: 1880.0  
 $S_{22} = 0.977 + j 0.379$

Fig.6 Output Impedance (Balance)



MSL1

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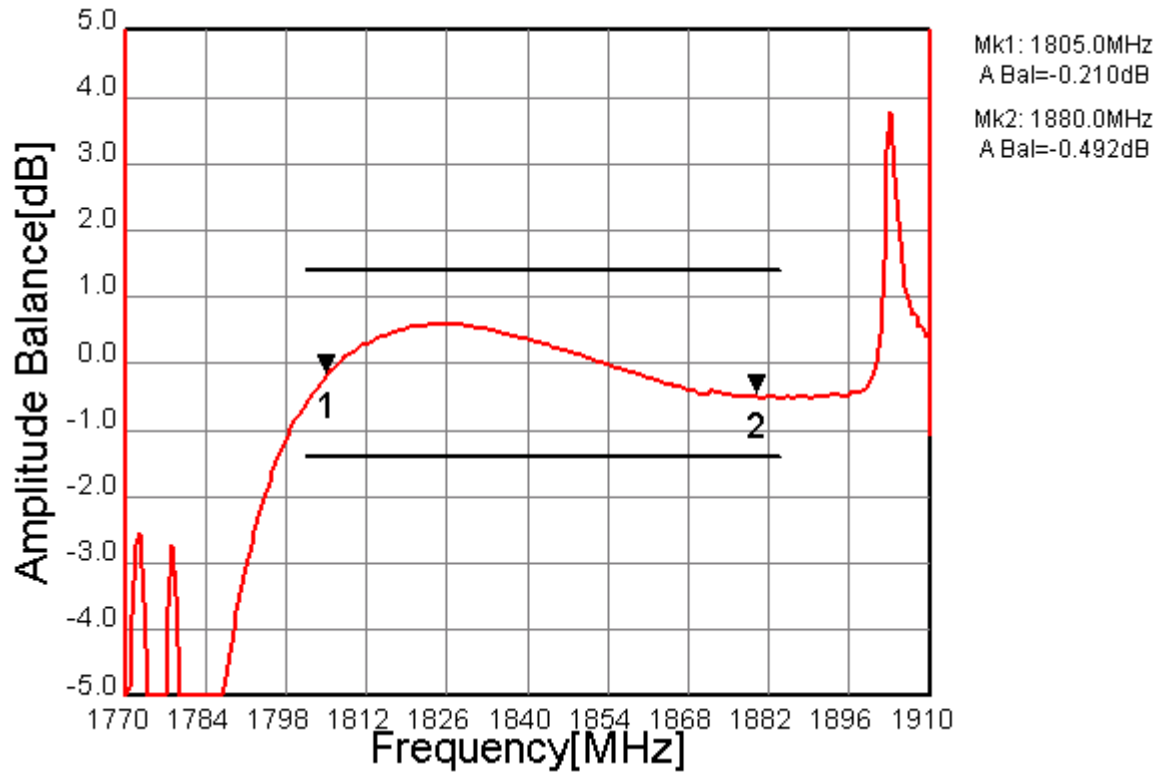


Fig.7 Amplitude Balance

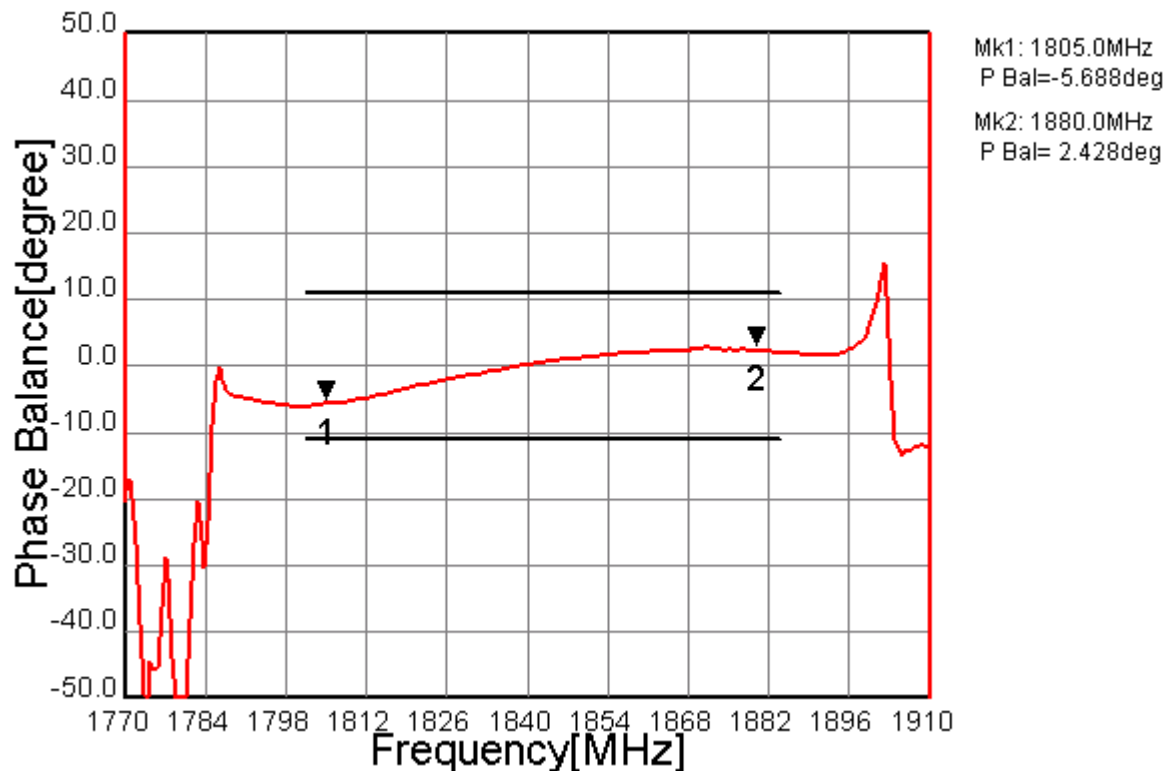


Fig.8 Phase Balance