Pb-free

RoHS

MSL1

* Pb Free Part

Customer Name	**Standard specification**	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	PCS-Rx (50/150)	Date	March 31, 2010
Part Number	FAR-F6KB-1G9600-B4GB	Version 3.1c	

Table 1. Electrical specifications

Passband: 1930 ~ 1990 MHz						
Item	Condition	Specification			Unit	Remarks
		Min.	Typ.	Max.		
Insertion Loss	1930~1990 MHz	-	1.6	2.5	dB	+25+/-2°C
		-	-	2.7	dB	
Ripple	1930~1990 MHz	-	0.5	1.7	dB	
Absolute attenuation	DC~1830 MHz	30	40	-	dB	
	1830~1910 MH	15	18	-	dB	+25+/-2°C
		10	-	-	dB	
	2010~2070 MHz	15	18	-	dB	+25+/-2°C
		10	-	-	dB	
	2070~2150 MHz	22	26	-	dB	
	2150~3000 MHz	30	36	-	dB	
	3000~6000 MHz	30	43	-	dB	
VSWR (Input)	1930~1990 MHz	-	1.7	2.2	-	
VSWR (Output)	1930~1990 MHz	-	1.8	2.2	-	
Amplitude Balance |S21|/|S31|	1930~1990 MHz	-1.5	-0.8/+1.0	+1.5	dB	
Phase Balance (ΦS21-ΦS31)-180	1930~1990 MHz	-12	-1/+4	+12	deg.	
Input Impedance	Unbalanced	50			Ohm	
Output Impedance	Balance	150//15nH			Ohm	
Operating Temperature		-30 ~ +85			°C	
Device size		1.4typ.x1.0typ.x0.56typ			mm	

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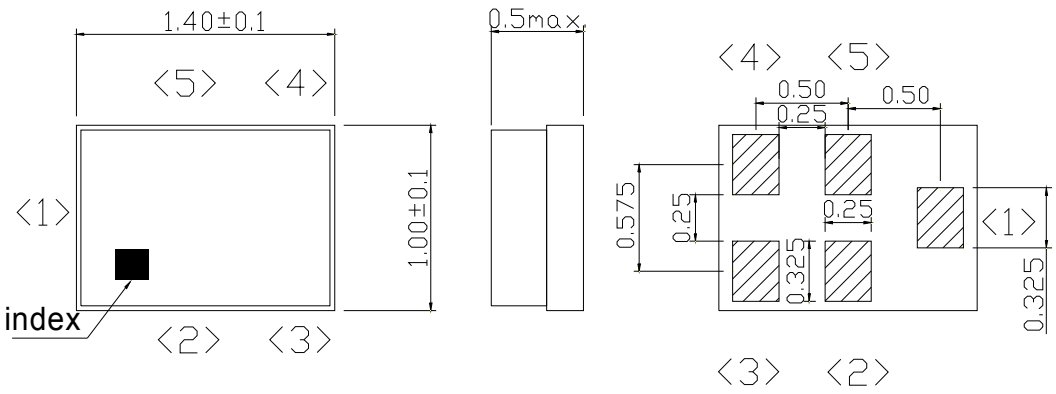
Dimension

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

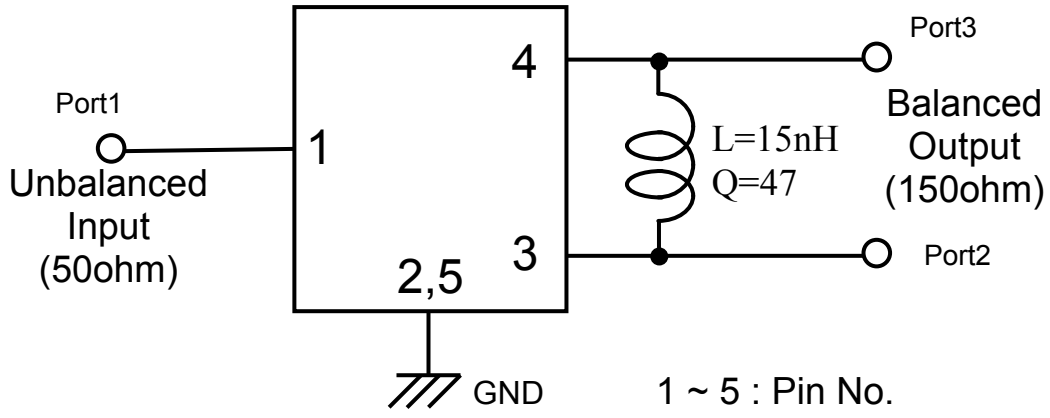


Unit: mm

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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System	PCS-Rx (50/150)	Date	March 31, 2010
Part Number	FAR-F6KB-1G9600-B4GB	Version 3.1c	

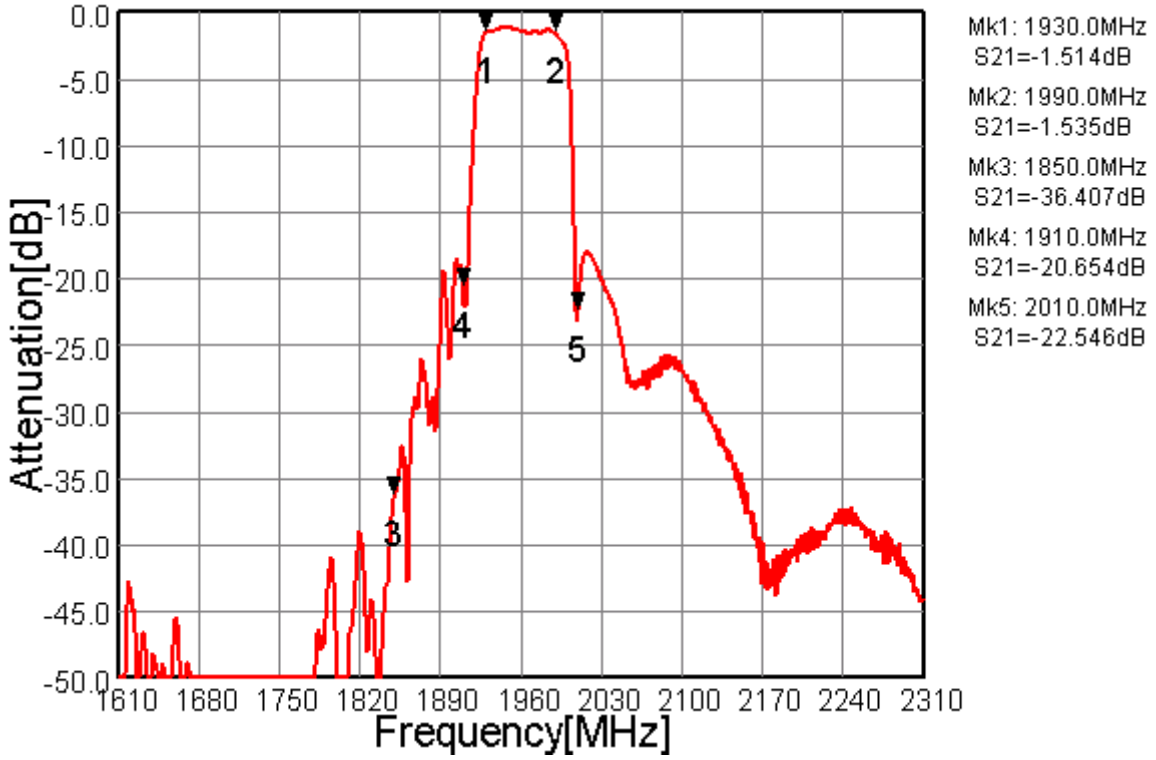

Fig.1 Pass-band Characteristics

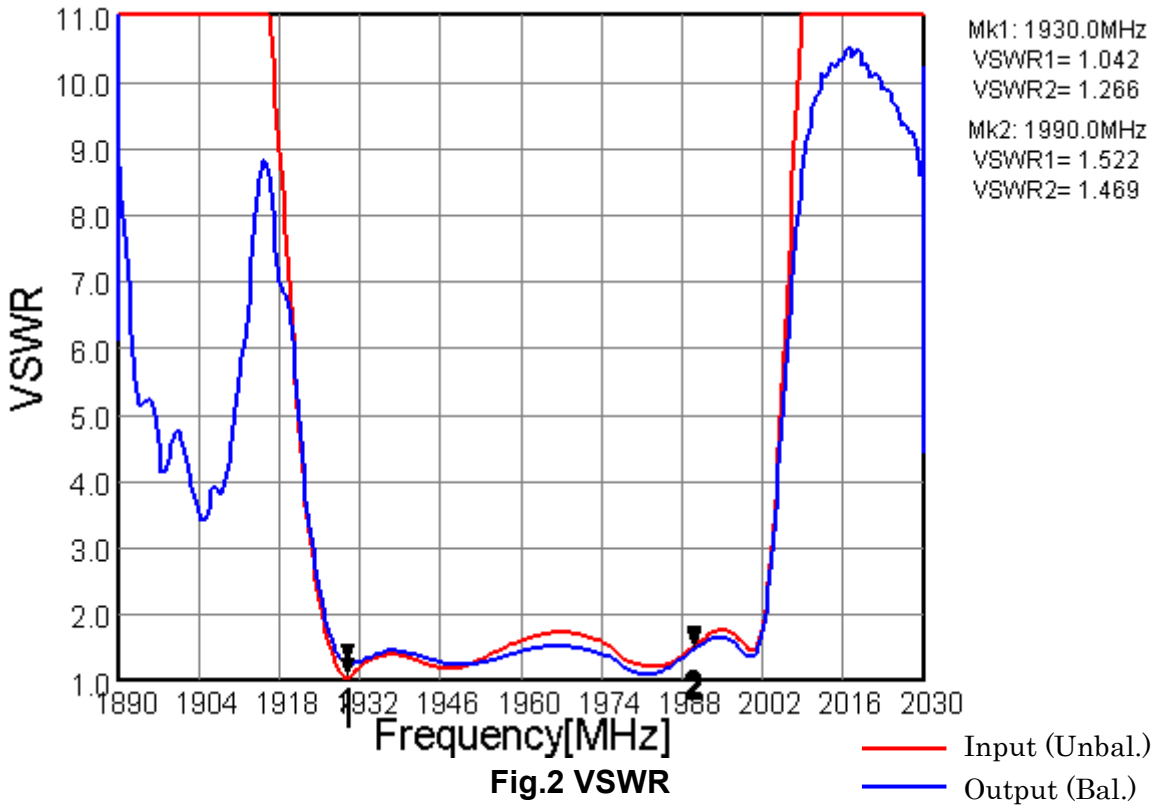

Fig.2 VSWR

Customer Name	**Standard specification**	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	PCS-Rx (50/150)	Date	March 31, 2010
Part Number	FAR-F6KB-1G9600-B4GB	Version 3.1c	

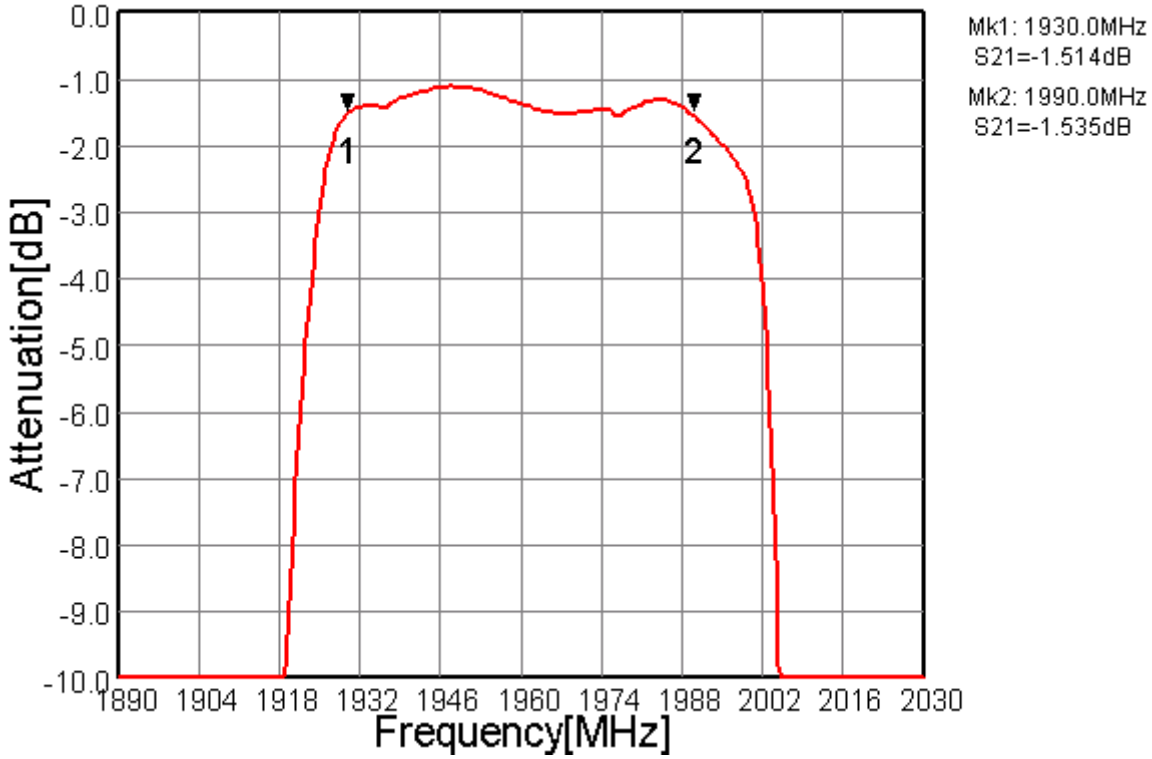

Fig.3 In-band Characteristics

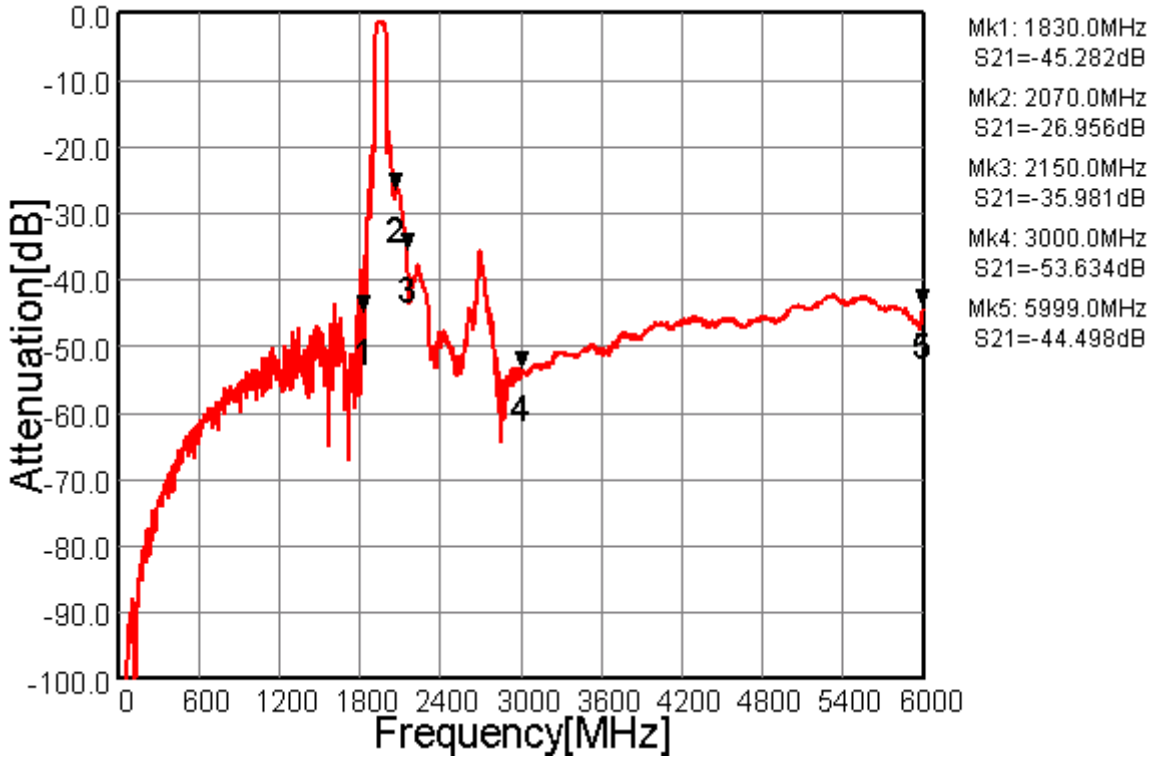

Fig.4 Wide-band Characteristics

Customer Name	**Standard specification**	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	PCS-Rx (50/150)	Date	March 31, 2010
Part Number	FAR-F6KB-1G9600-B4GB	Version 3.1c	

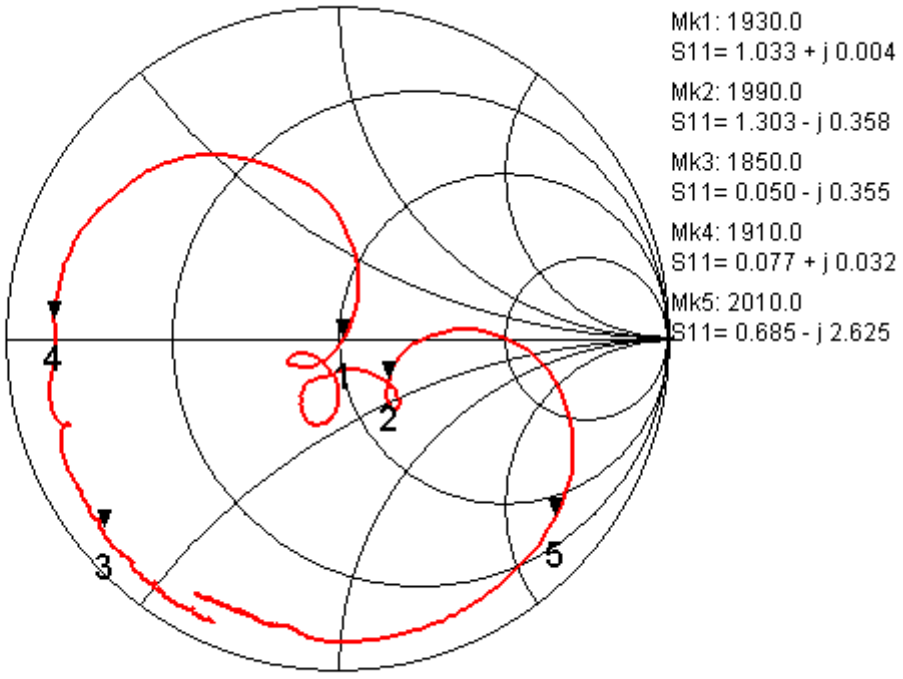

Fig.5 Input Impedance (Unbalance)

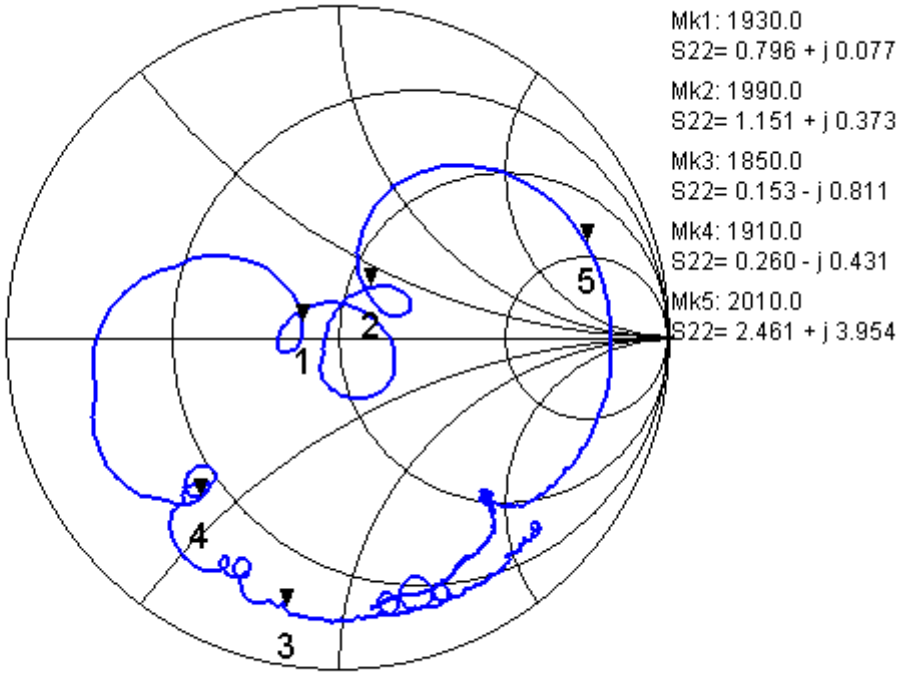

Fig.6 Output Impedance (Balance)

Customer Name	**Standard specification**	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	PCS-Rx (50/150)	Date	March 31, 2010
Part Number	FAR-F6KB-1G9600-B4GB	Version 3.1c	

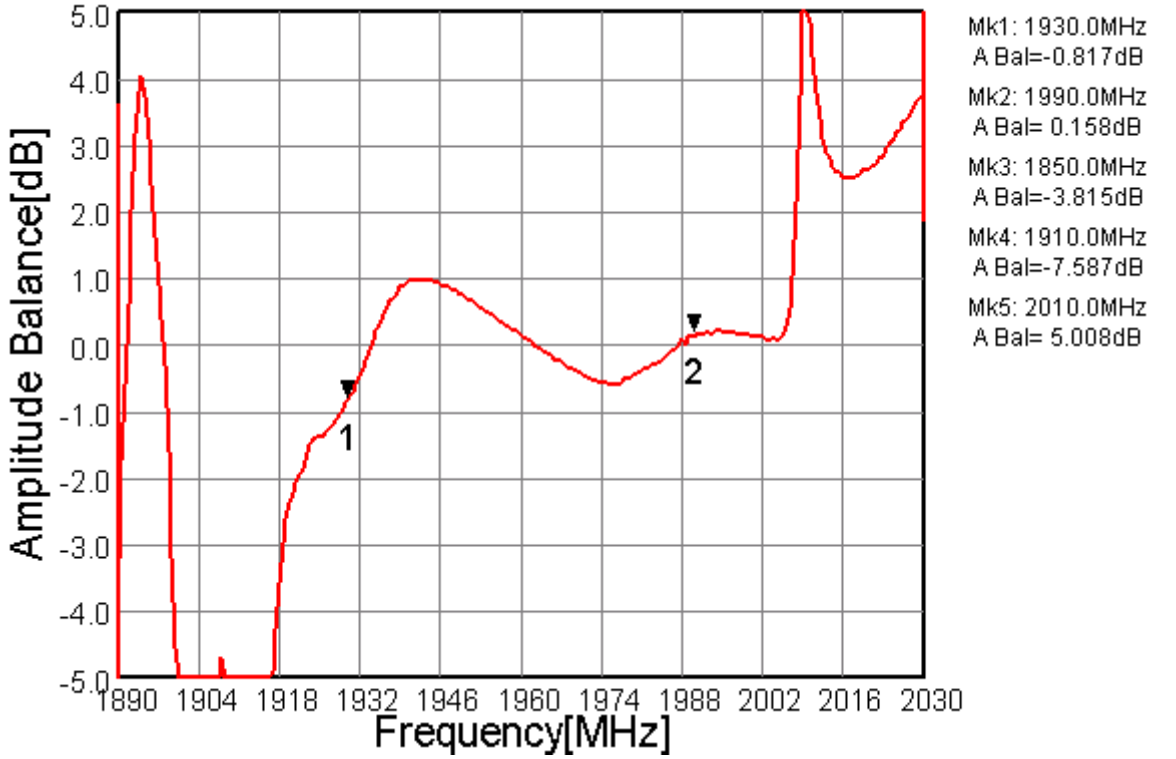

Fig.7 Amplitude Balance

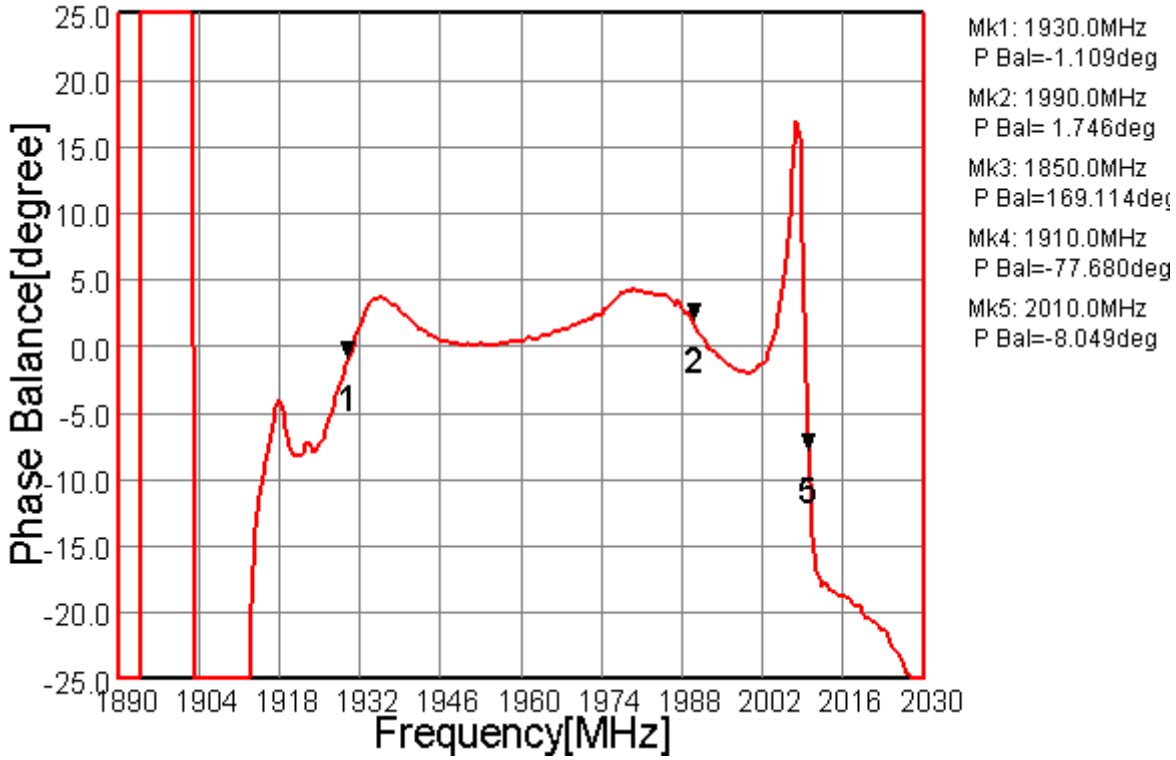

Fig.8 Phase Balance