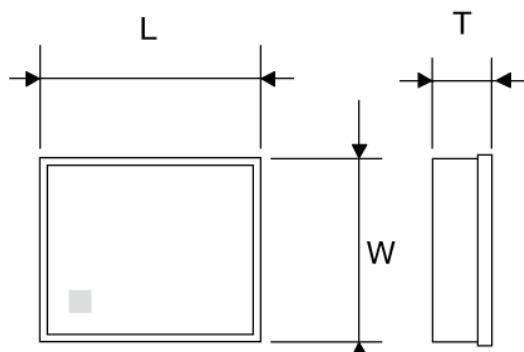


## SAW Filter

F6QB1G585P2BQ



## ■ Features

- Item Summary  
GPS(GNSS), 403
- Lifecycle Stage  
Mass Production
- Standard packaging quantity (minimum)  
Taping Embossed 5000 , 15000pcs

## ■ Products characteristics table

Temperature Range	-30 to +85°C
Use	GPS
Insertion Loss	1.5/1.7dB
RoHS Compliance	Yes
Halogen Free	Yes
Soldering Method	Reflow

## ■ External Dimensions

L	1.1mm +0.1:-0.1
W	0.9mm +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	GPS+GLONASS (50/100 ohm)	DATE	Feb. 14, 2013
Part Number	F6QB1G585P2BQ	Version 1.0a	Final

**Table 1 Electrical Specification**

Passband: 1565.42 - 1605.886 MHz						
Parameter	Condition (MHz)	Specifications			Unit	Remarks
		Min.	Typ.	Max.		
Insertion Loss	1574.42 - 1576.42	-	1.5	1.9	dB(*1)	
	1565.42 - 1585.42	-	1.6	2.0	dB(*1)	
	1597.5515 - 1605.8860	-	1.7	2.1	dB(*1)	
VSWR (Input/output)	1574.42 - 1576.42	-	1.4	2.0	-	
	1565.42 - 1585.42	-	1.5	2.0	-	
	1597.5515 - 1605.8860	-	1.6	2.0	-	
Absolute attenuation	10 - 794	45	50	-	dB	
	794 - 925	40	47	-	dB	
	925 - 960	40	46	-	dB	
	1427 - 1463	30	34	-	dB	
	1710 - 1785	35	42	-	dB	
	1850 - 1910	35	42	-	dB	
	1920 - 1980	34	39	-	dB	
	2401 - 2483	30	35	-	dB	
Amplitude balance ( S21/S31 )	1574.42 - 1576.42	-1.5	+0.5/+0.7	+1.5	dB	
	1565.42 - 1585.42	-5	-0.2/+2.7	+5	dB	
	1597.5515 - 1605.8860	-1.8	-1/-0.6	+1.8	dB	
Phase balance (∠S21-∠S31)+180)	1574.42 - 1576.42	-10	+5/+7	+10	deg	
	1565.42 - 1585.42	-10	-2/+7	+10	deg	
	1597.5515 - 1605.8860	-15	-10/-8	+15	deg	
Operating temperature range		-30 ~ +85			°C	
Input impedance (Unbalanced)		50			ohm	
Output impedance (Balanced)		100//18nH			ohm	
Device size		1.1typ. x 0.9typ. x 0.5max.			mm	

(\*1) Specification of insertion loss includes loss that comes from the test board. (0.1dB)



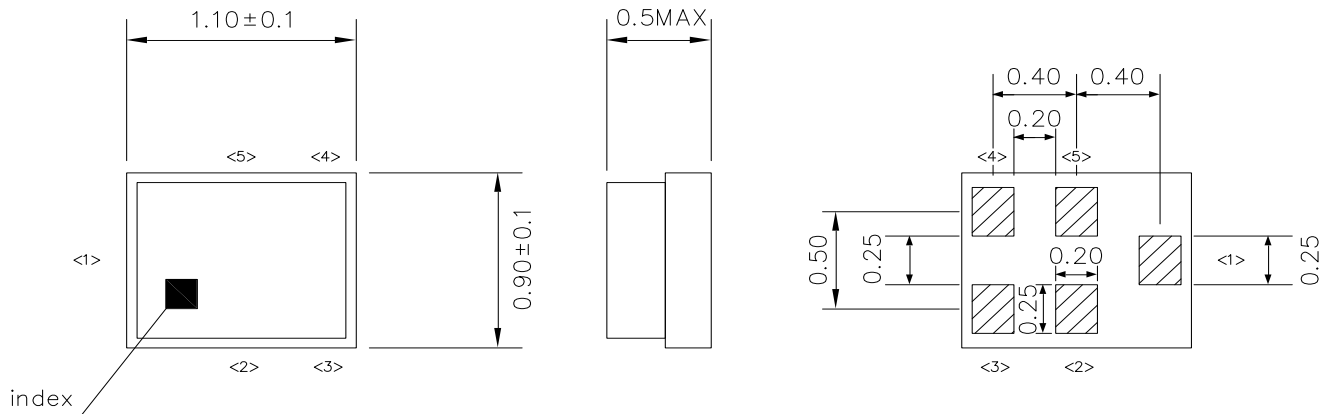
MSL1

\*Pb Free part

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### Dimensions

Device size: 1.1mmtyp. x 0.9mmtyp. x 0.5mmmax.

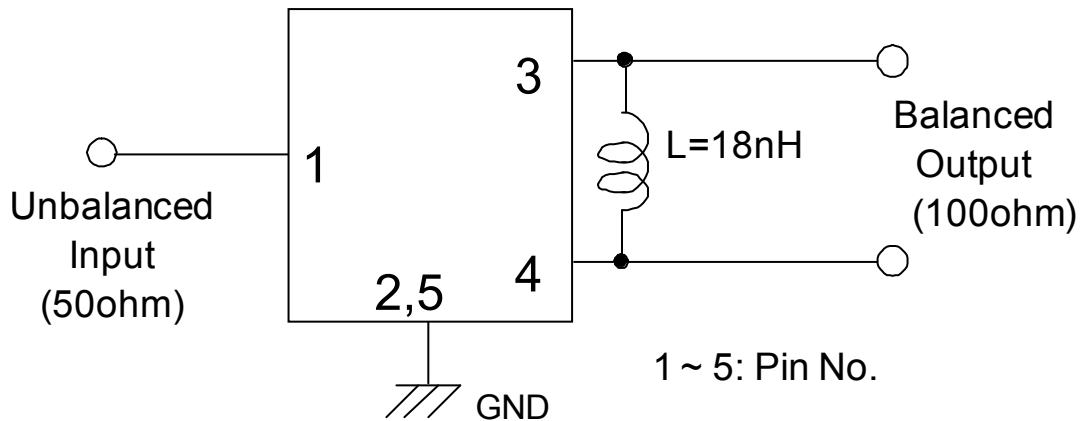


Unit: mm

### 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





MSL1

\*Pb Free part

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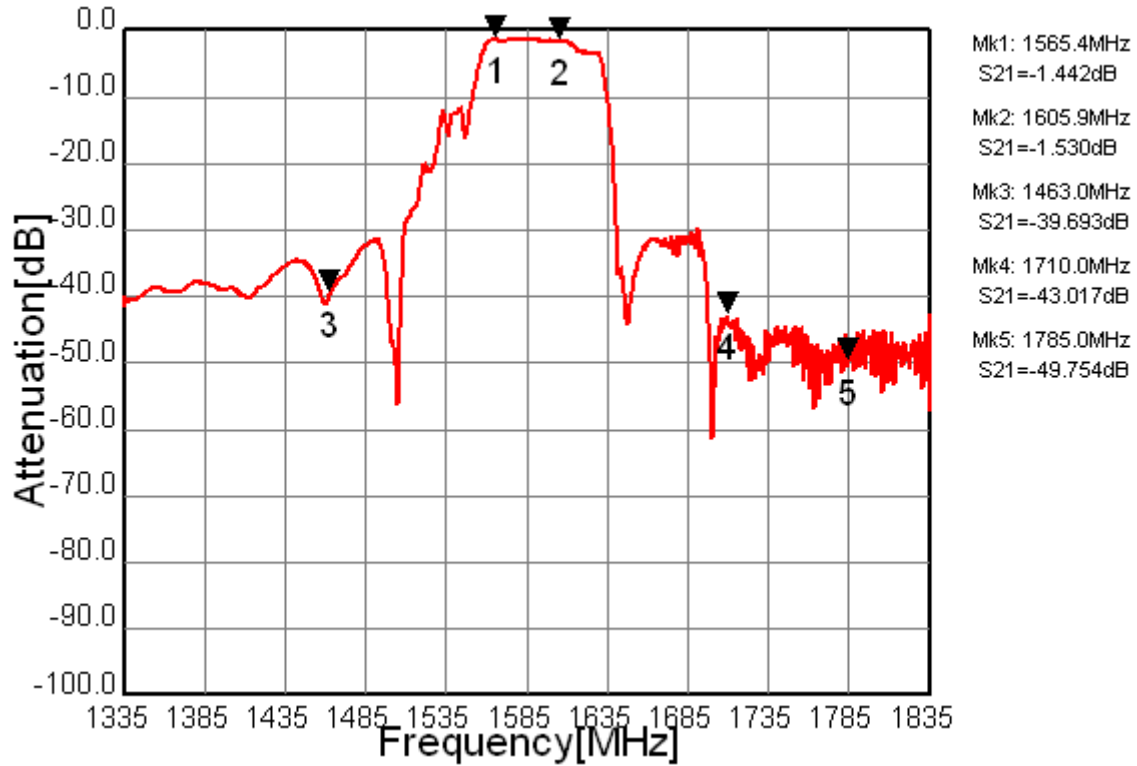


Fig.1 Pass-band Characteristic

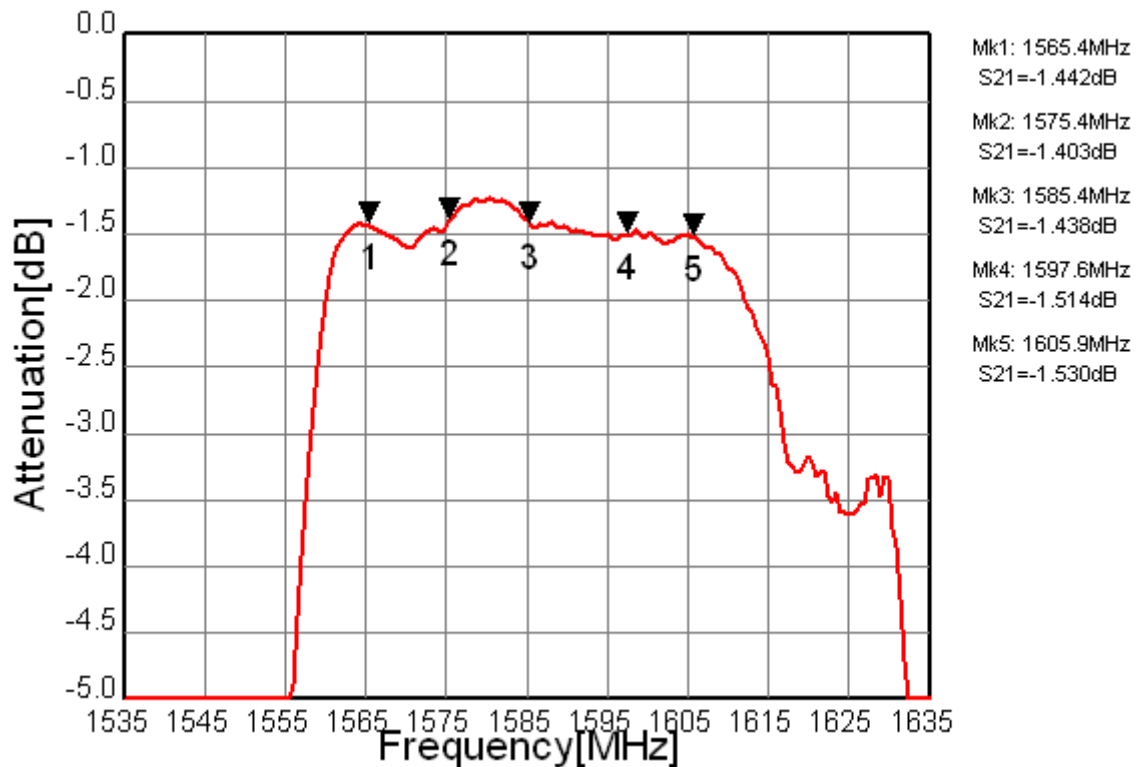


Fig.2 In-band Characteristic



MSL1

\*Pb Free part

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Part Number	F6QB1G585P2BQ	Version 1.0a	Final

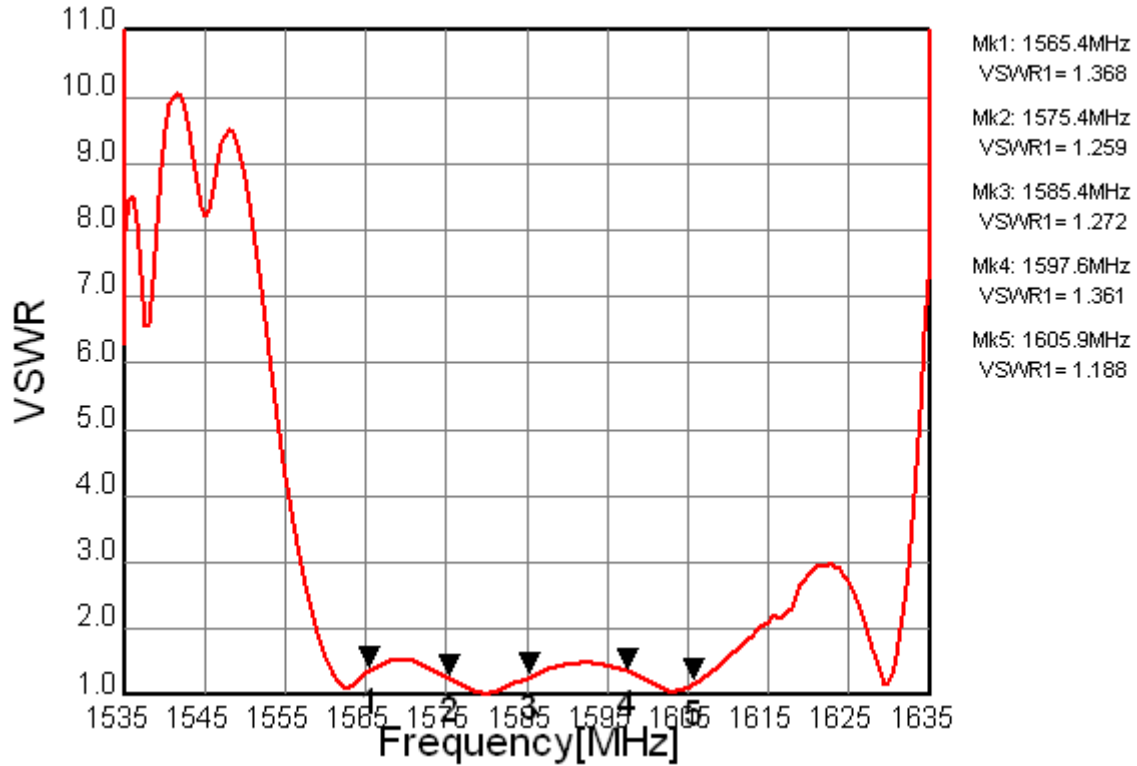


Fig.3 VSWR (INPUT)

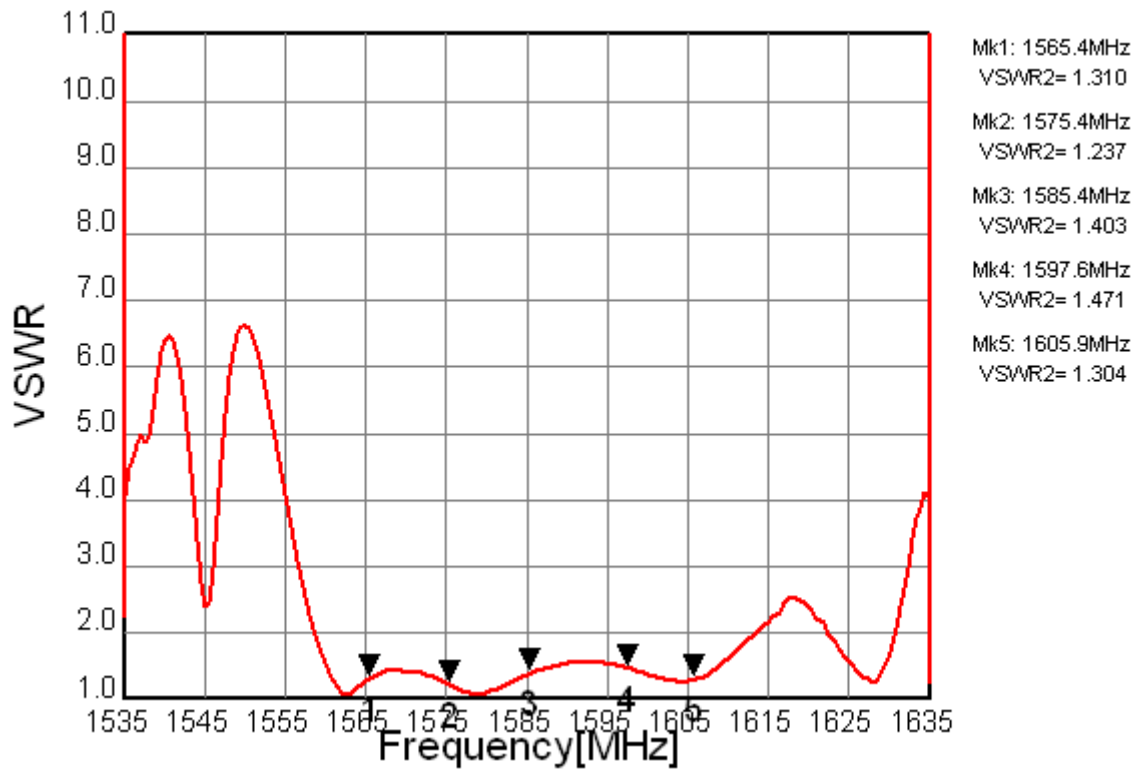


Fig.4 VSWR (OUTPUT)



MSL1

\*Pb Free part

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Part Number	F6QB1G585P2BQ	Version 1.0a	Final

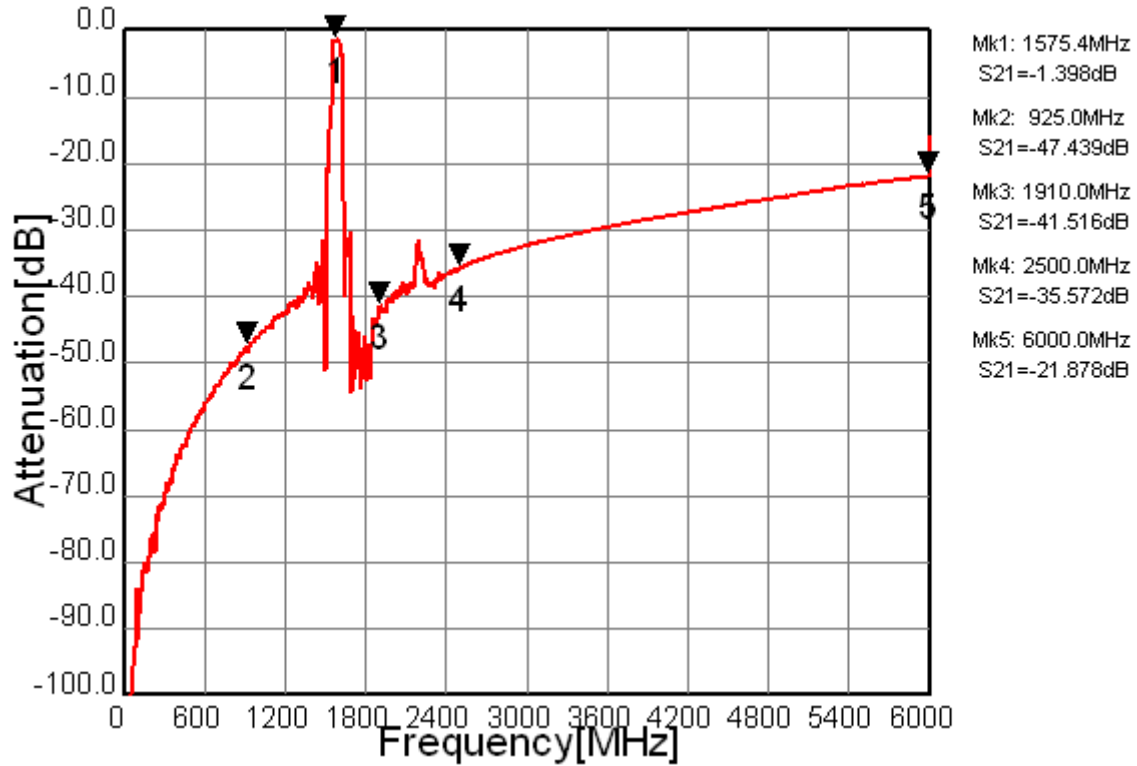


Fig.5 Wide-band Characteristic



MSL1

\*Pb Free part

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Part Number	F6QB1G585P2BQ	Version 1.0a	Final

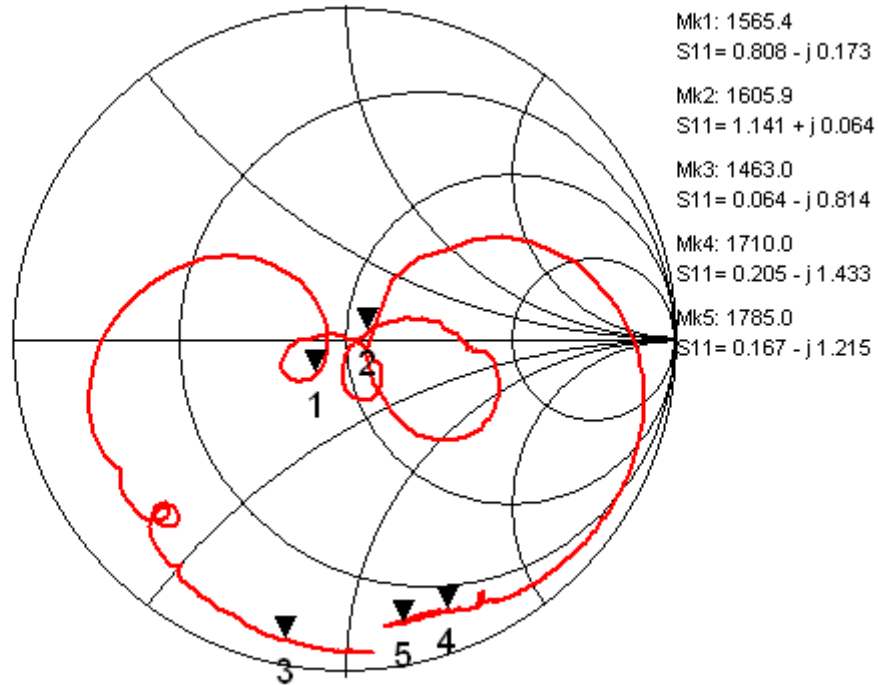


Fig.6 Impedance (S11)

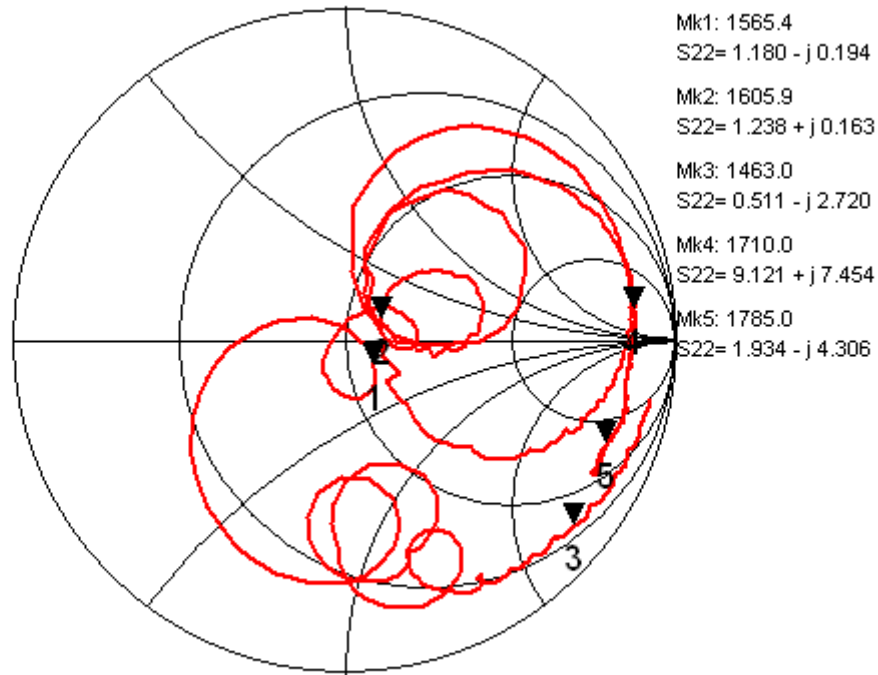


Fig.7 Impedance (S22)



MSL1

\*Pb Free part

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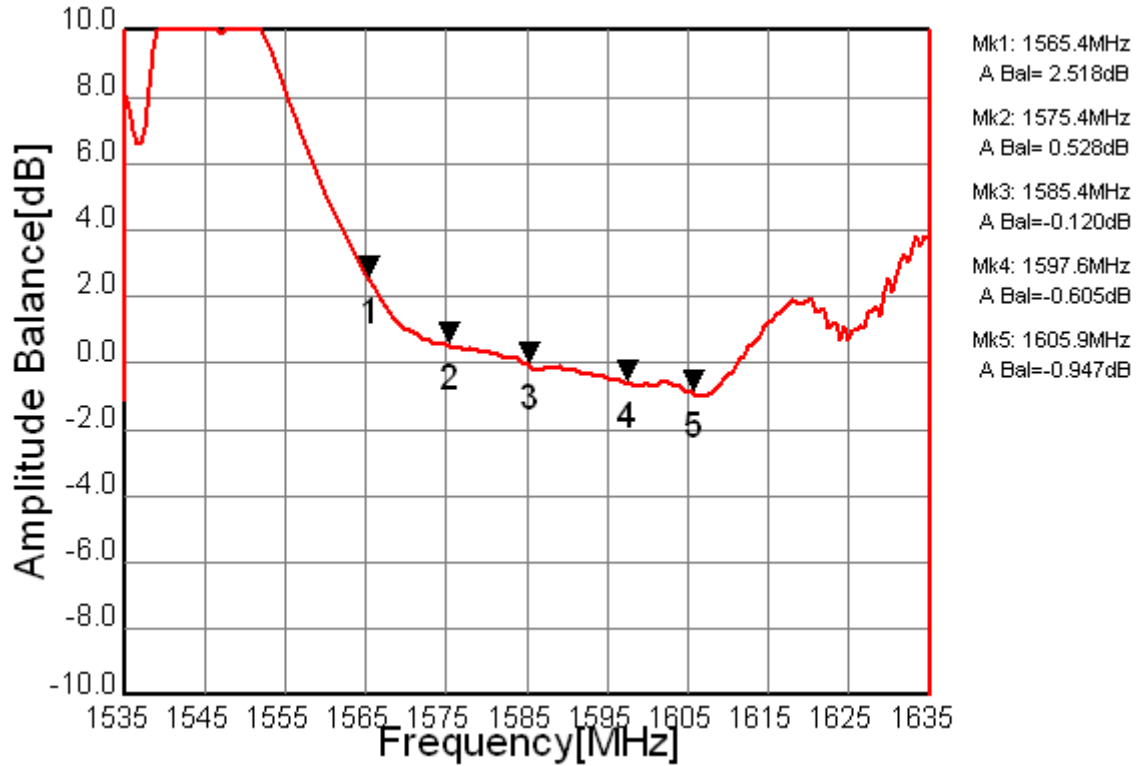


Fig.8 Amplitude balance

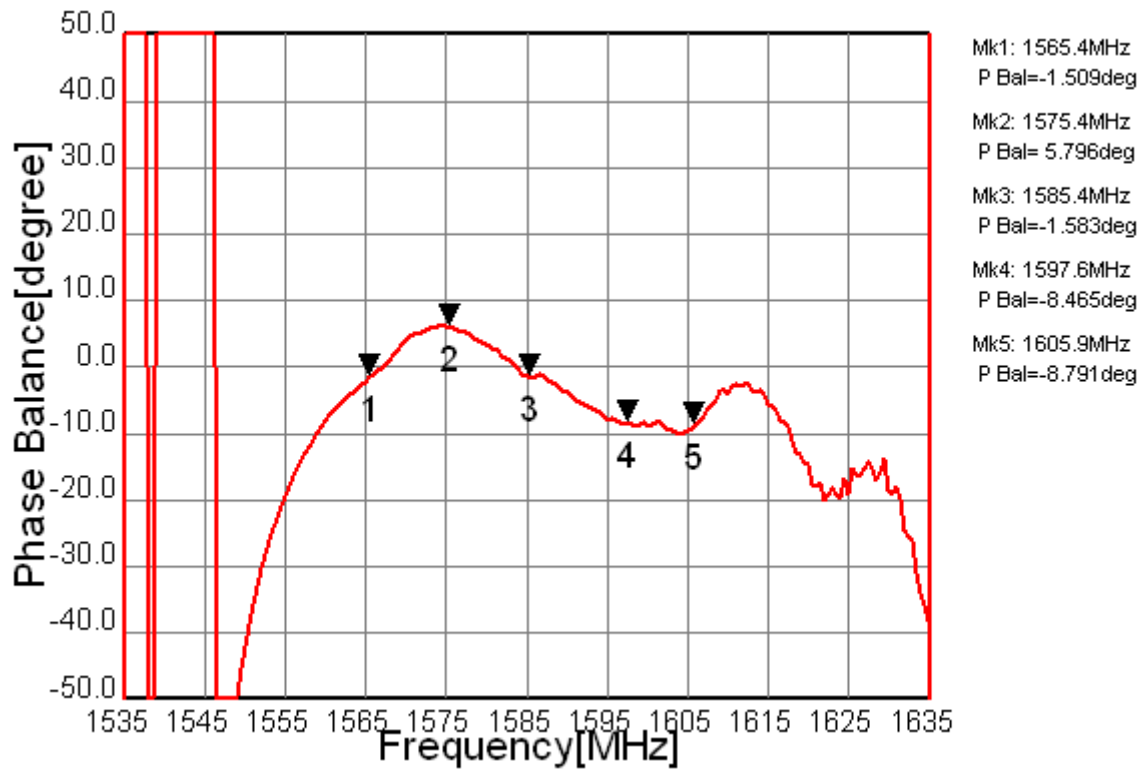


Fig.9 Phase balance





MSL1

\*Pb Free part

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Part Number	F6QB1G585P2BQ	Version 1.0a	Final

## Ordering Code

Ordering Code	Packing	Reel size	Status
F6QB1G585P2BQ-J	Tape & Reel	5,000 pcs.	MP
F6QB1G585P2BQ-JA	Tape & Reel	Less than 5,000 pcs.	MP
F6QB1G585P2BQ-Y	Tape & Reel	15,000 pcs.	MP
F6QB1G585P2BQ-YA	Tape & Reel	Less than 15,000 pcs.	MP
F6QB1G585P2BQ-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.