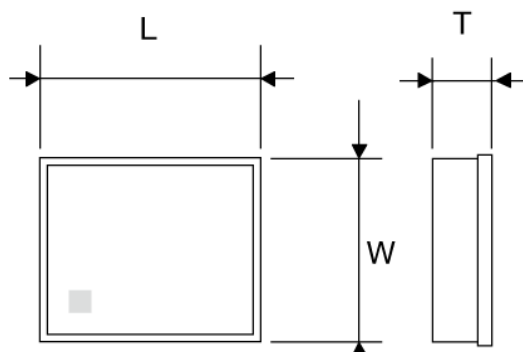


SAW Dual Filter

G5QH942M5N2LN



■ Features

- Item Summary
W-CDMA / GSM, 604
- Lifecycle Stage
Mass Production
- Standard packaging quantity (minimum)
Taping Embossed 5000 , 15000pcs

■ Products characteristics table

Temperature Range	-30 to +85°C
Band(3GPP)	B5 / B8
GSM	850 / 900
Use	WCDMA / GSM
Transmitting / Receiving	Rx Dual Filter
Insertion Loss	1.6/2.0dB
Attenuation	56/50dB
RoHS Compliance	Yes
Halogen Free	Yes
Soldering Method	Reflow

■ External Dimensions

L	1.5mm +0.1:-0.1
W	1.1mm +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	GSM850/GSM900 Rx (50/100ohms)	DATE	Aug. 09, 2010
Part Number	G5QH942M5N2LN	Version 3.0 bc	Final

Table 1.Electrical specifications(Filter 1)

Pass Band (869-894MHz)						
Item	Condition (MHz)	Specification			Unit	Remark
		Min.	Typ.	Max.		
Insertion Loss	869-894	-	1.6	2.3	dB (*1)	
Ripple	869-894	-	0.4	1.3	dB	
Input VSWR	869-894	-	1.6	2.0	-	
Output VSWR	869-894	-	1.7	2.0	-	
Absolute attenuation	DC-824	40	55	-	dB	
	824-849	48	56	-	dB	
	914-960	25	35	-	dB	
	1738-1788	35	47	-	dB	
	1850-1910	35	46	-	dB	
	1920-6000	25	33	-	dB	
Amplitude balance (S21/S31)	869-894	-1.0	-0.1/+0 .4	+1.0	dB	
Phase balance ((∠S21-∠S31)+180)	869-894	-10	-2/+1	+10	deg	
Input impedance (Unbalanced)		50			Ohm	
Output impedance (Balanced)		100			Ohm	
Operating temperature		-30to +85			°C	

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



MSL1

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Table 2.Electrical specifications(Filter 2)

Pass Band (925-960MHz)						
Item	Condition (MHz)	Specification			Unit	Remark
		Min.	Typ.	Max.		
Insertion Loss	925-960	-	2.0	3.0	dB (*1)	@927.4 - 957.6MHz
Ripple	925-960	-	0.8	2.0	dB	@927.4 - 957.6MHz
Input VSWR	925-960	-	1.8	2.3	-	@927.4 - 957.6MHz
Output VSWR	925-960	-	1.9	2.3	-	@927.4 - 957.6MHz
Absolute attenuation	DC-880	40	50	-	dB	
	880-915	47	50	-	dB	@882.4-912.6MHz
	1045-1750	35	46	-	dB	
	1750-4810	25	39	-	dB	
Amplitude balance (S21/S31)	925-960	-1.0	-0.4/ +0.0	+1.0	dB	@927.4 - 957.6MHz
Phase balance ((Φ S21- Φ S31)+180)	925-960	-10	-2/+3	+10	deg	@927.4 - 957.6MHz
Input impedance (Unbalanced)		50			Ohm	
Output impedance (Balanced)		100			Ohm	
Operating temperature		-30 to +85			°C	

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



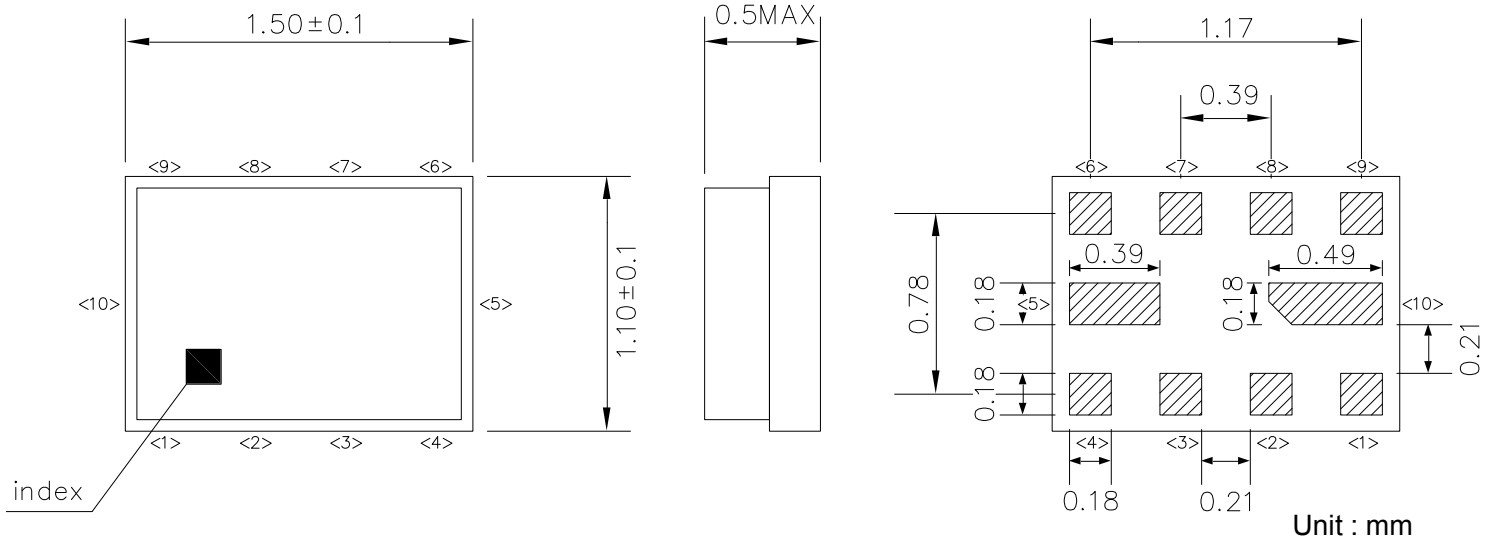
MSL1

* Pb Free Part

Customer Name	Standard specification	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GSM850/GSM900 Rx (50/100ohms)	DATE	Aug. 09, 2010
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Dimensions

Device size: 1.5yp. x 1.1typ. x 0.5max.



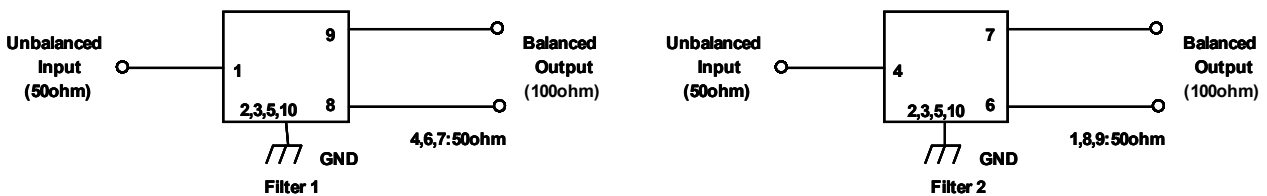
Unit : mm

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

Evaluation Circuit





MSL1

* Pb Free Part

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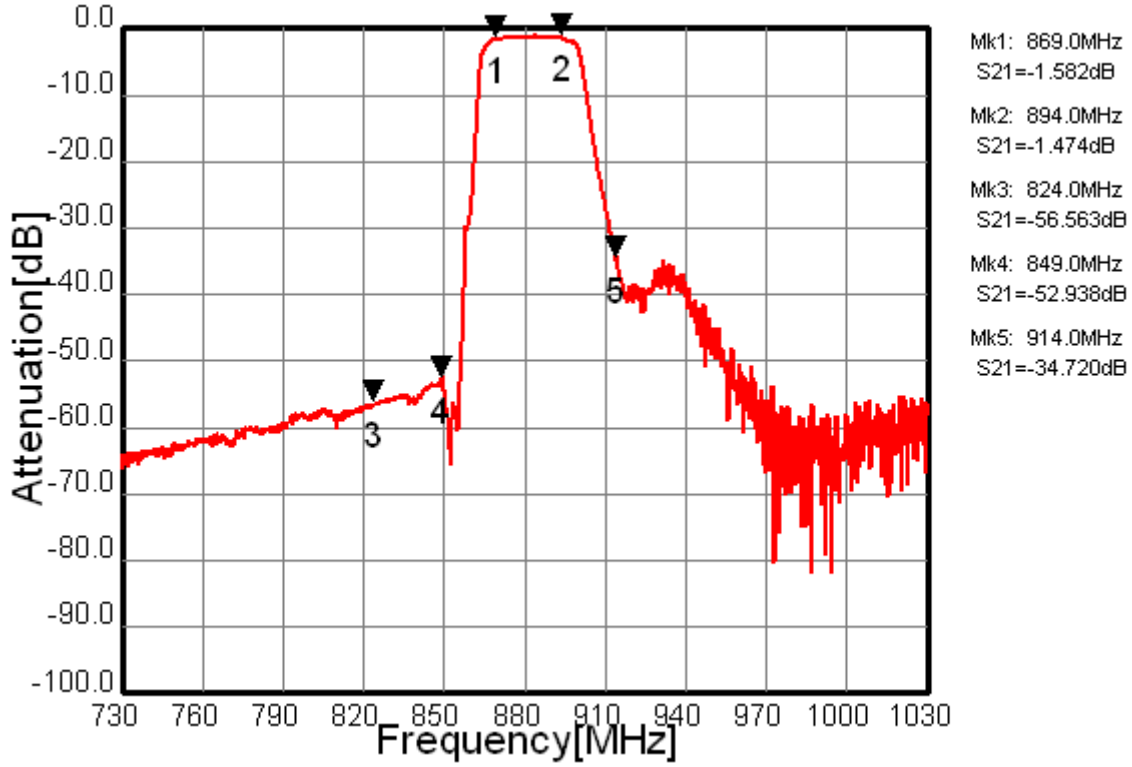


Fig.1 Pass-band Characteristic (Filter1)

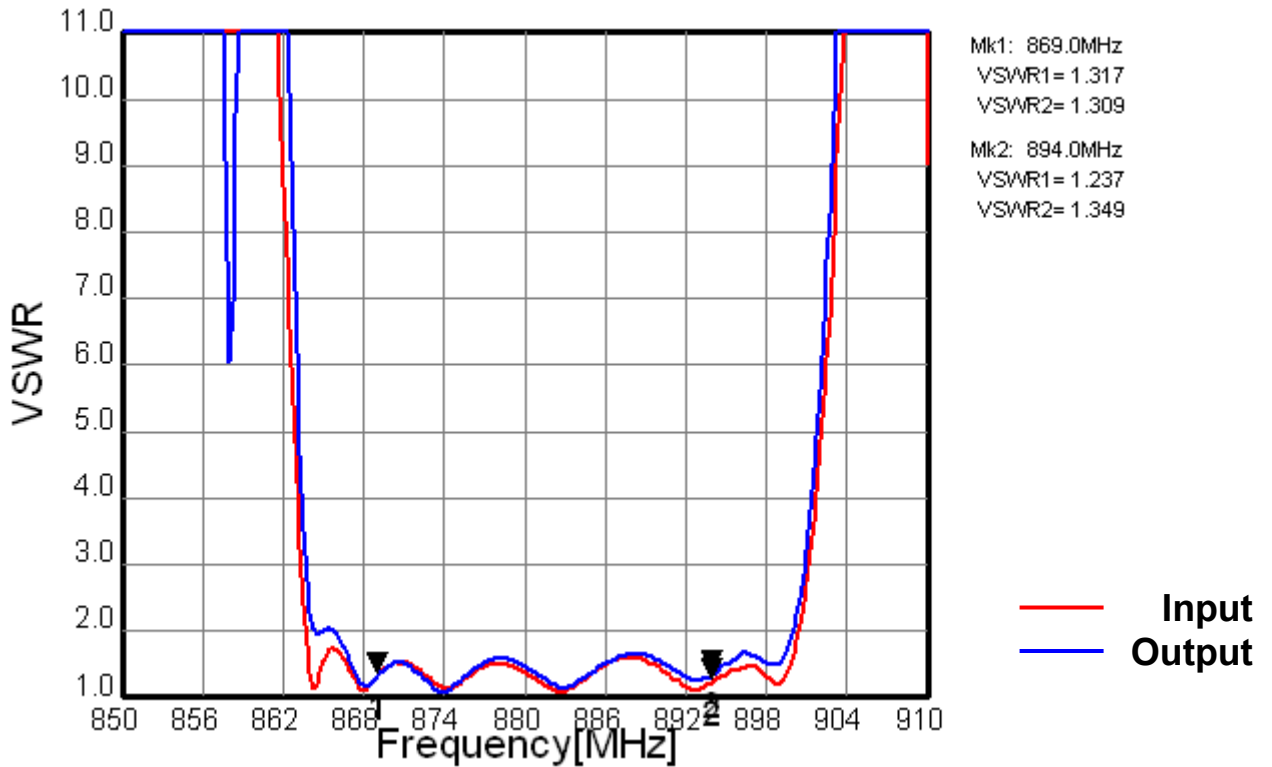


Fig.2 VSWR (Filter1)



MSL1

* Pb Free Part

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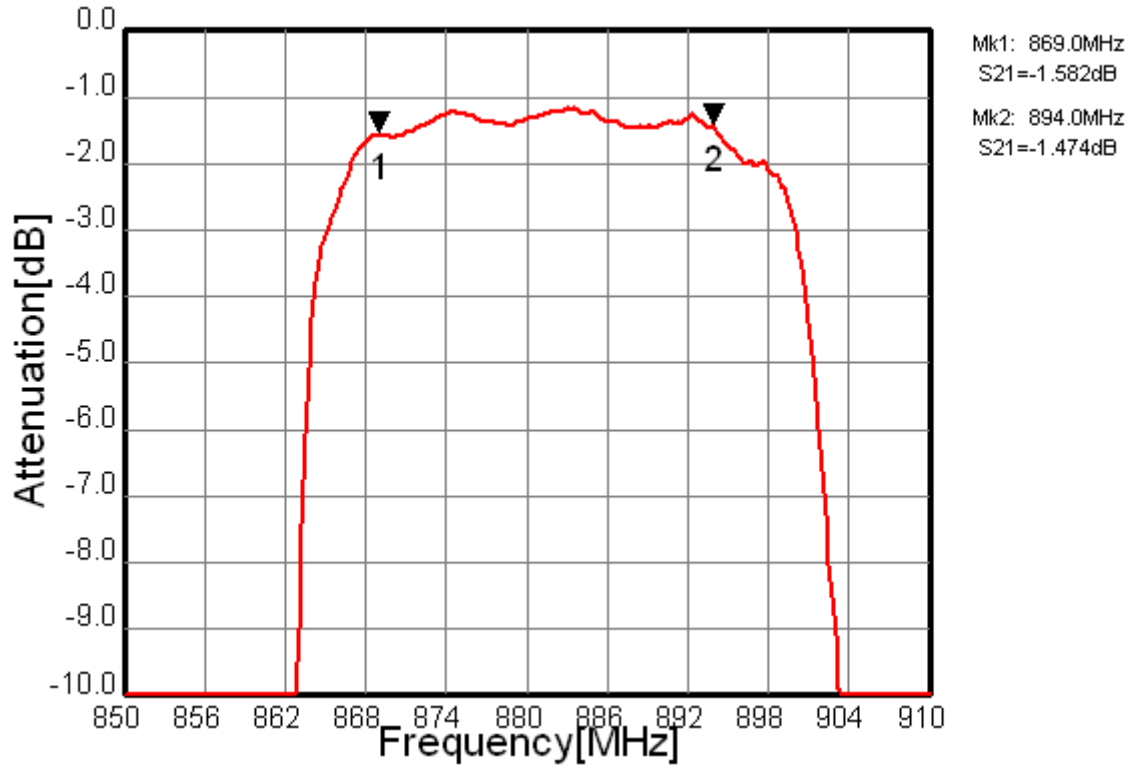


Fig.3 In-band Characteristic (Filter1)

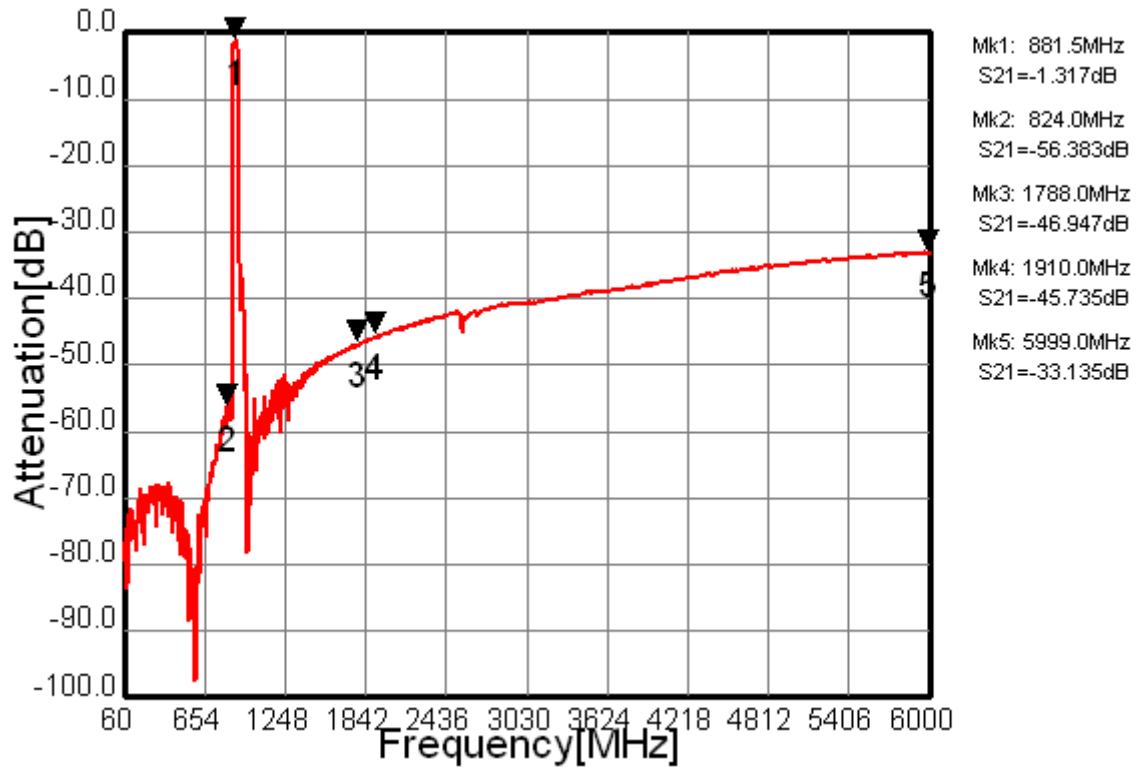


Fig.4 Wide-band Characteristic (Filter1)



MSL1

* Pb Free Part

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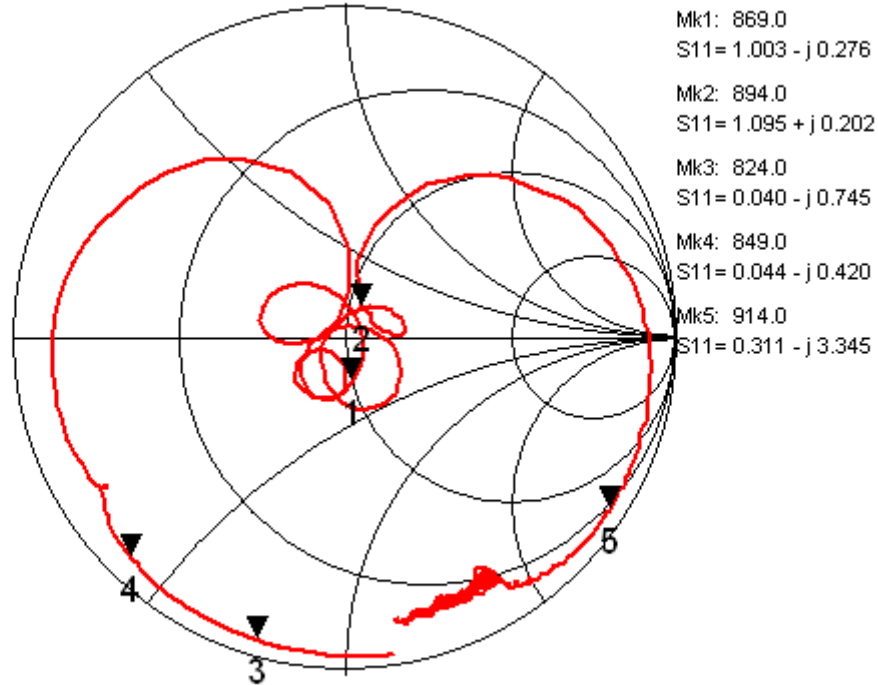


Fig.5 Impedance (S11) (Filter1)

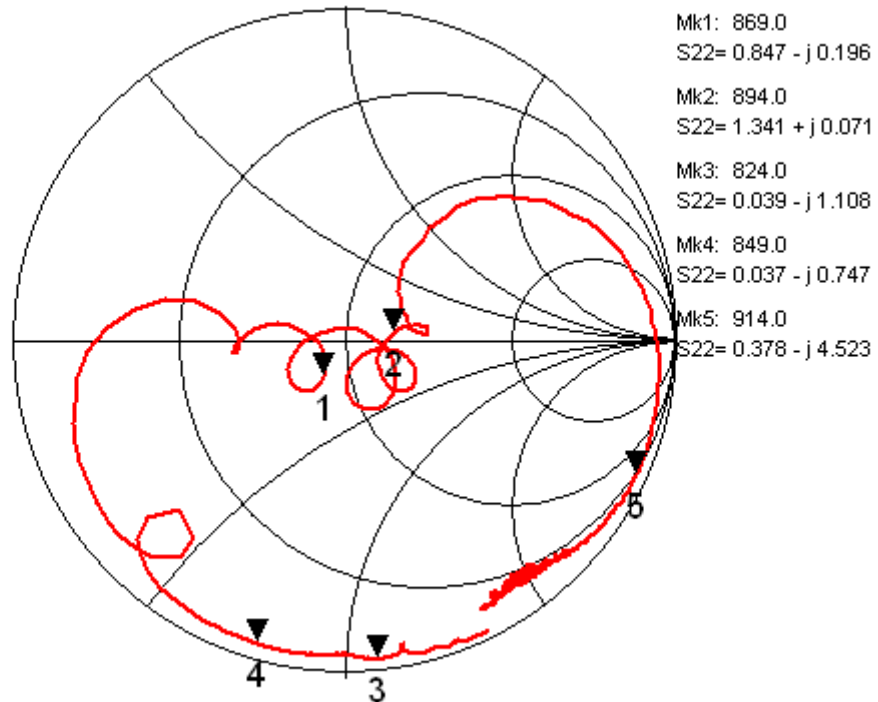


Fig.6 Impedance (S22) (Filter1)



MSL1

* Pb Free Part

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Part Number	G5QH942M5N2LN	Version 3.0 bc	Final

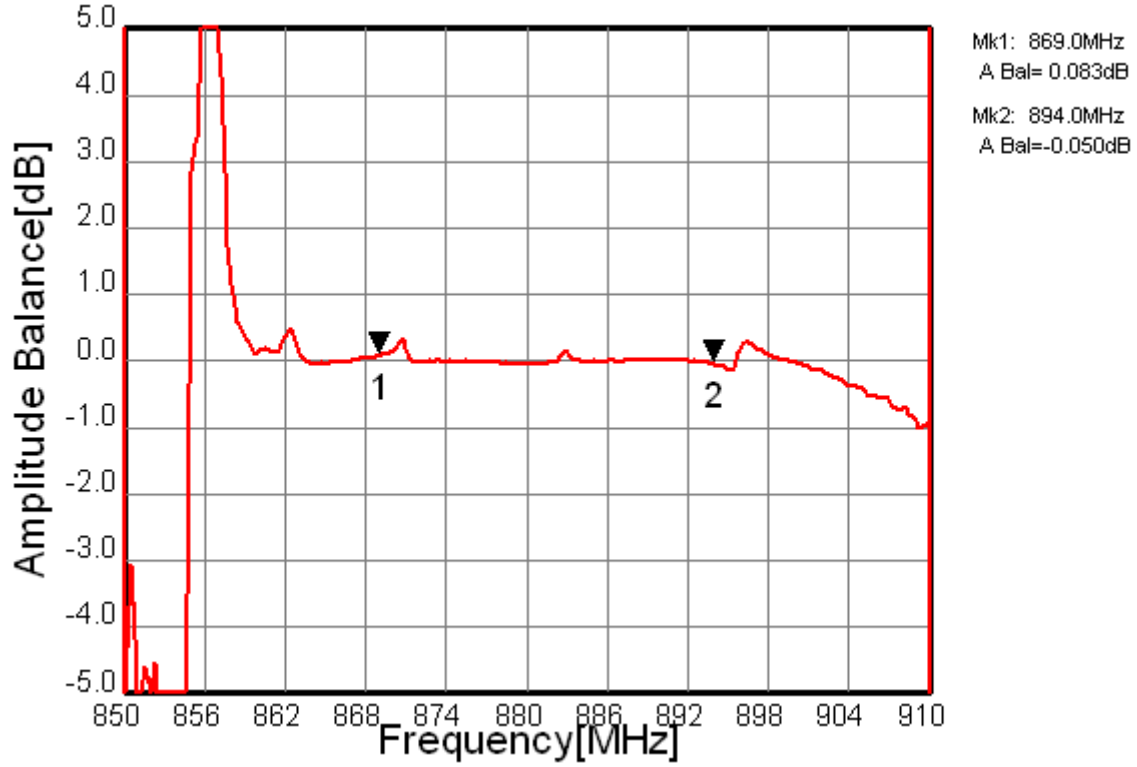


Fig.7 Amplitude Balance (Filter1)

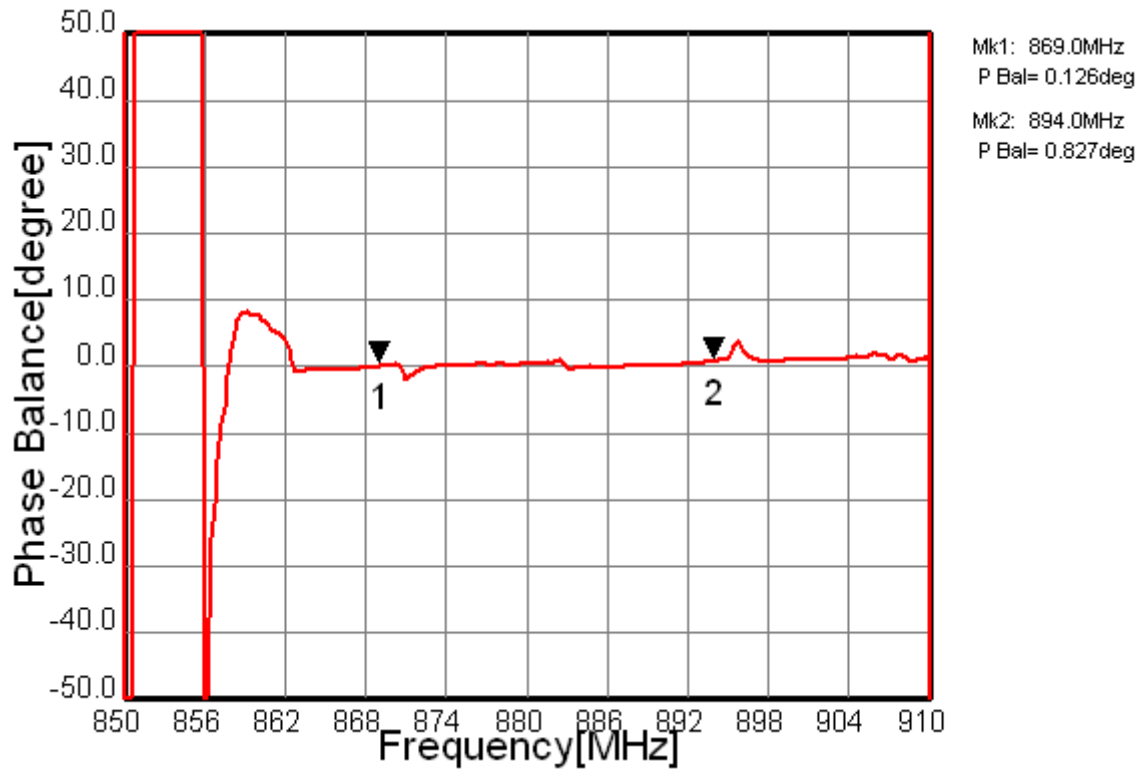


Fig.8 Phase Balance (Filter1)



MSL1

* Pb Free Part

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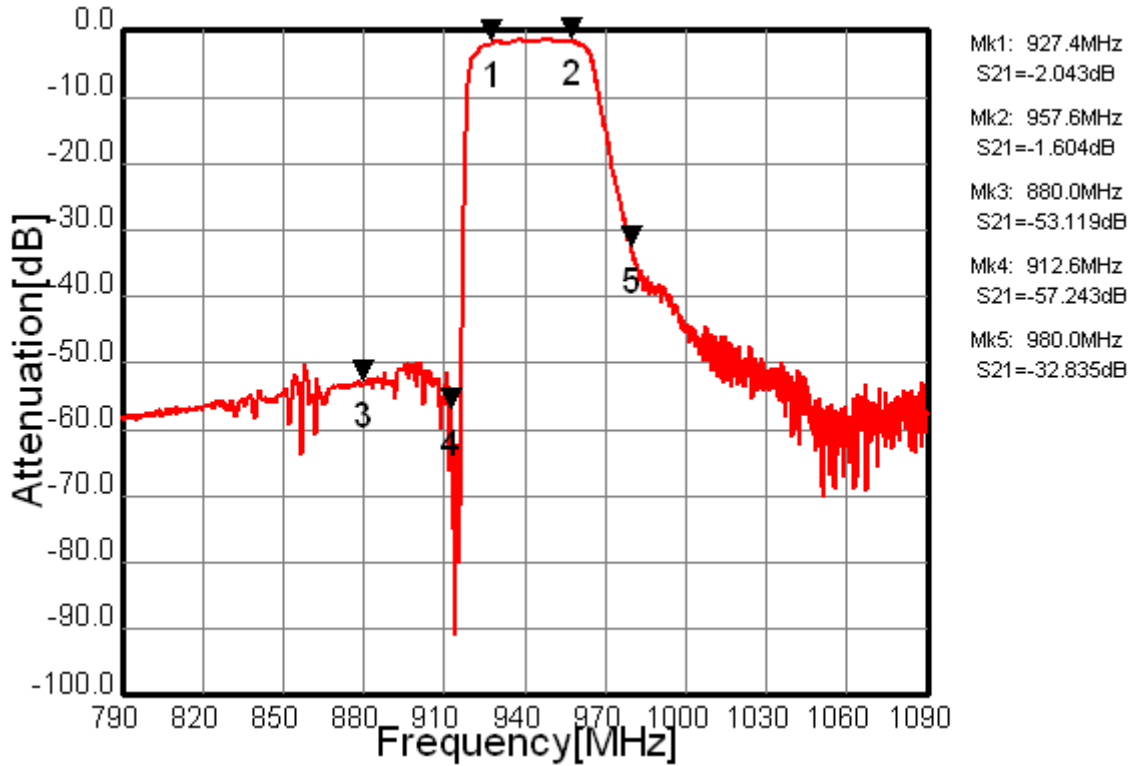


Fig.9 Pass-band Characteristic (Filter2)

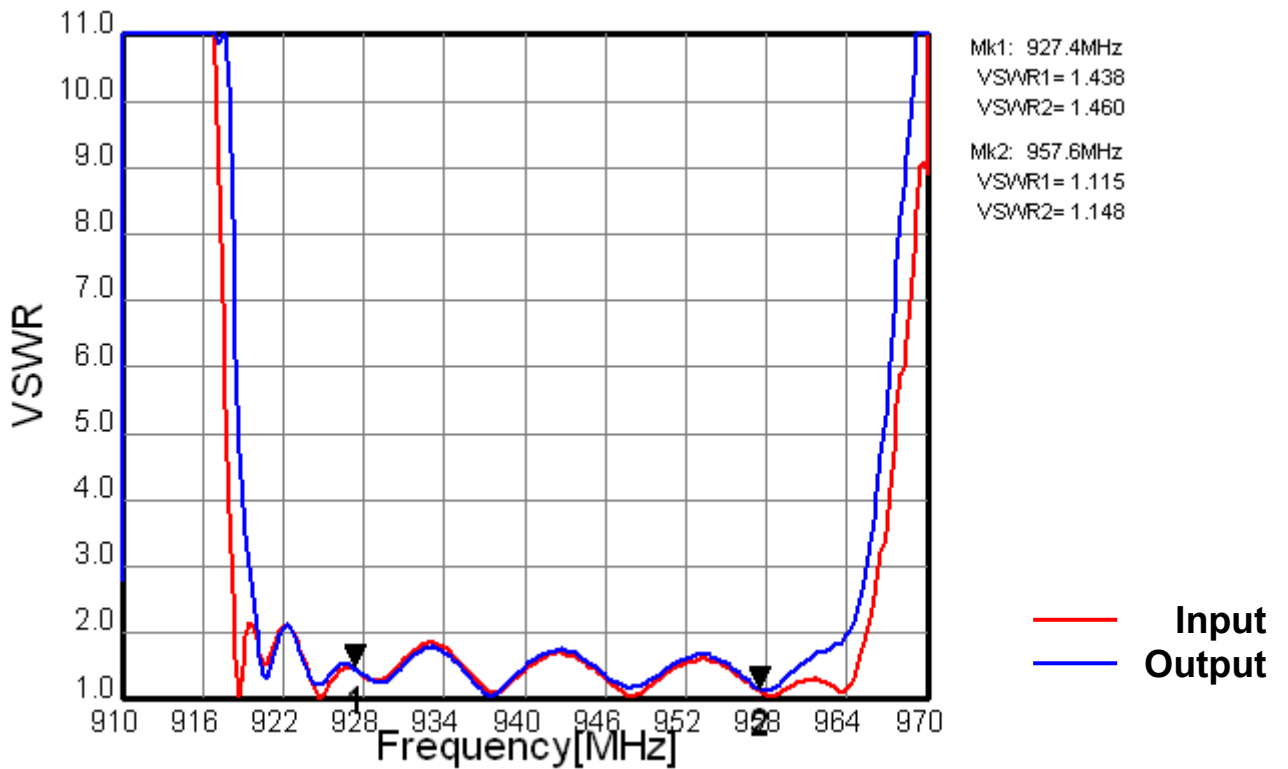


Fig.10 VSWR (Filter2)



MSL1

* Pb Free Part

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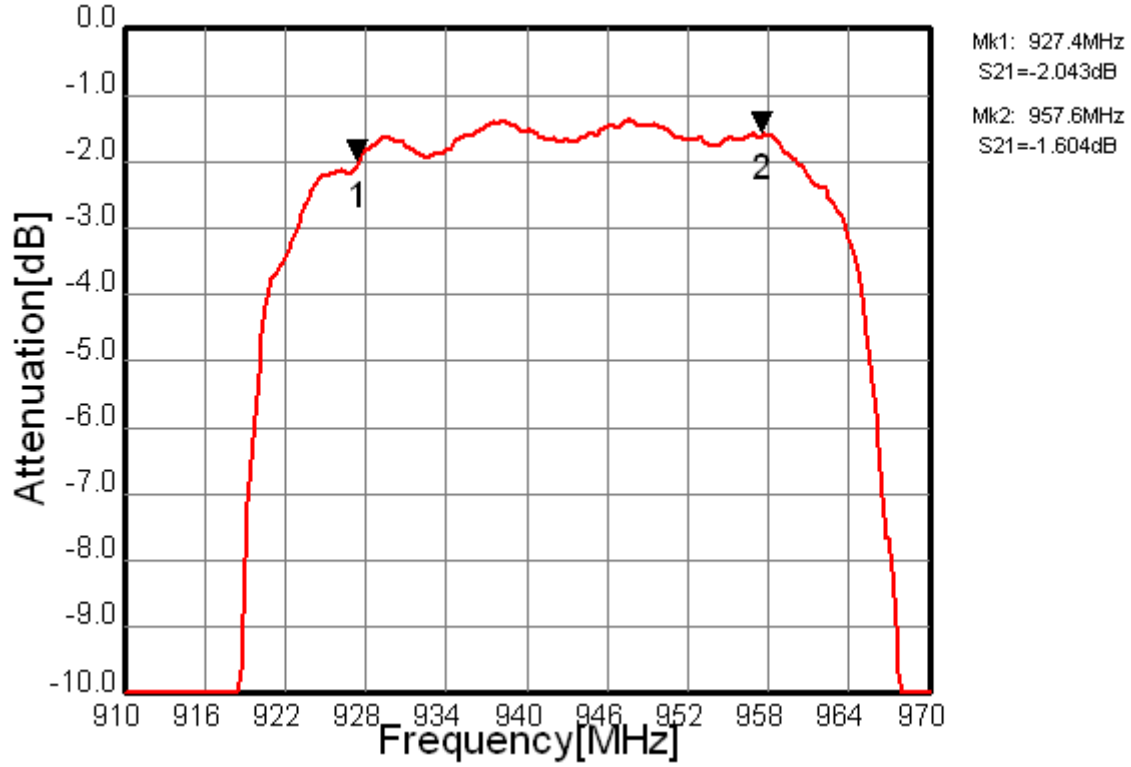


Fig.11 In-band Characteristic (Filter2)

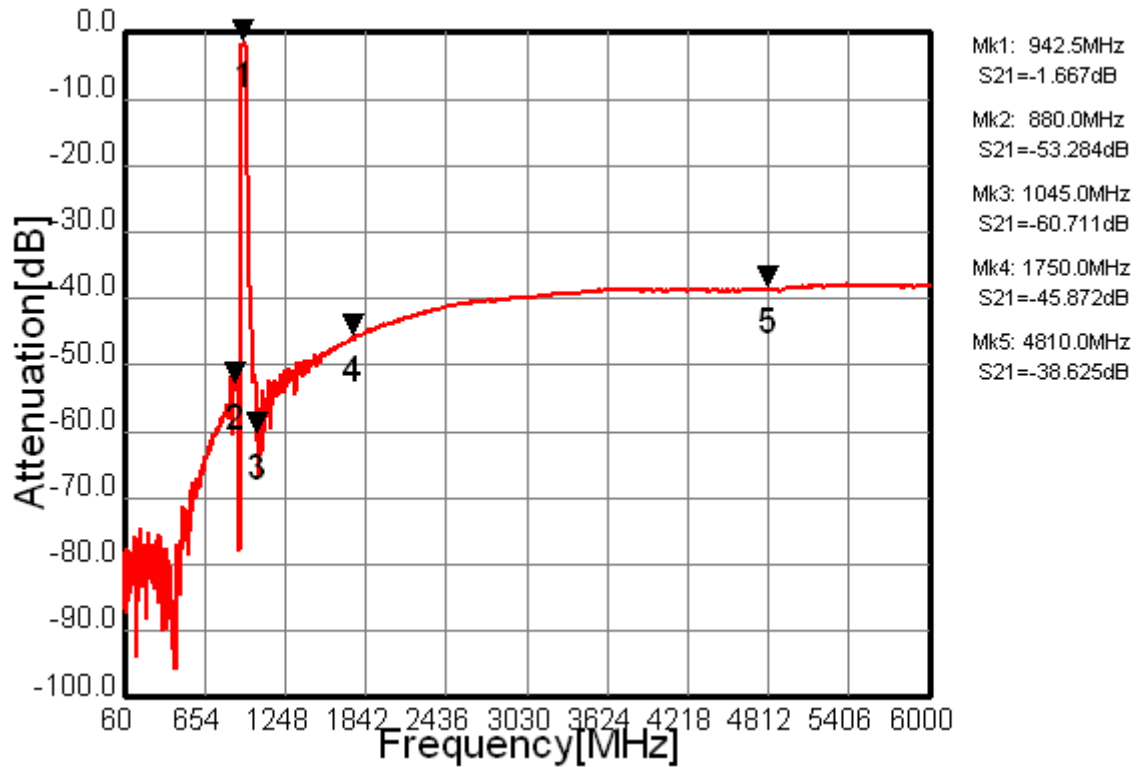


Fig.12 Wide-band Characteristic (Filter2)



MSL1

* Pb Free Part

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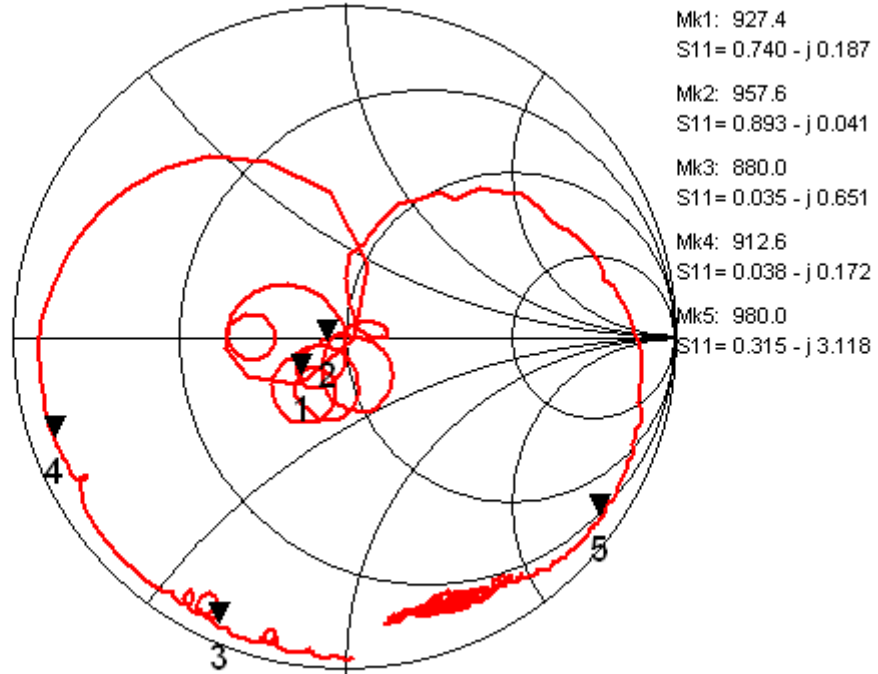


Fig.13 Impedance (S11) (Filter2)

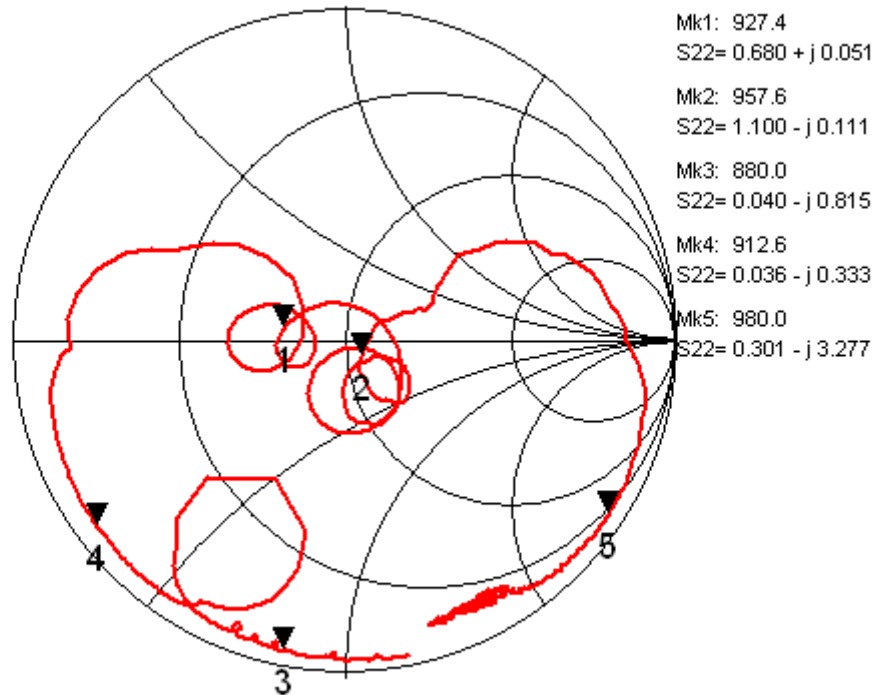


Fig.14 Impedance (S22) (Filter2)



MSL1

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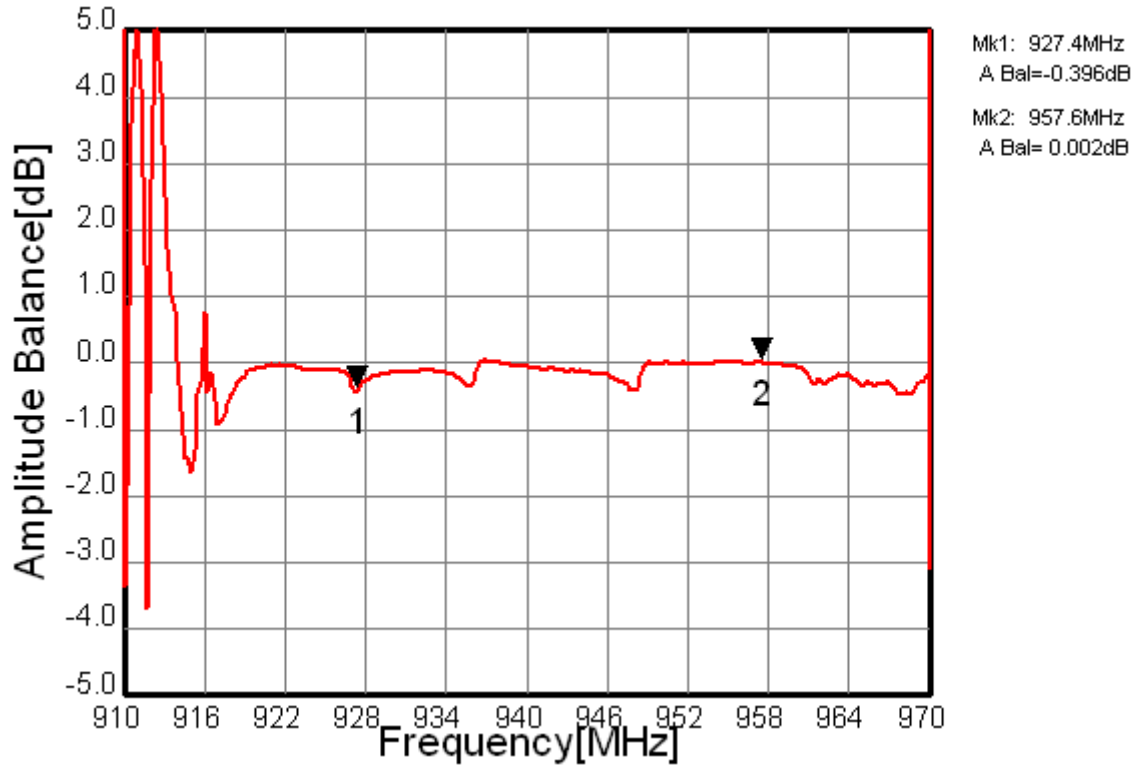


Fig.15 Amplitude Balance (Filter2)

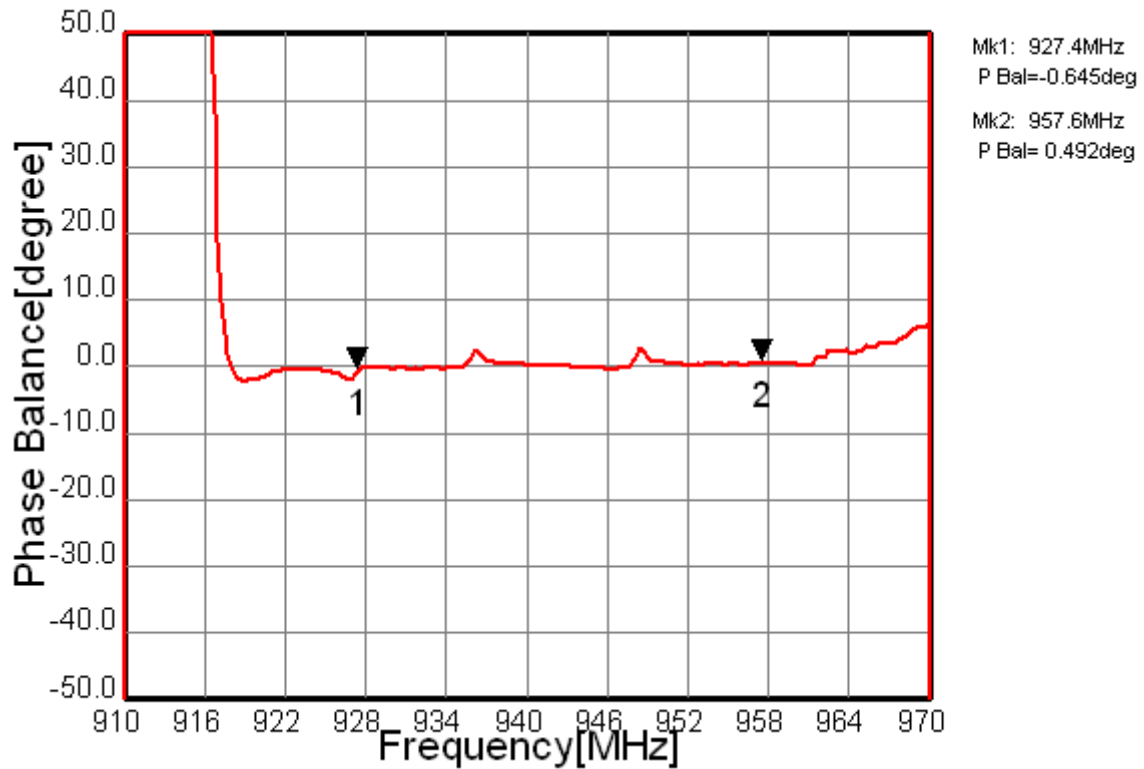


Fig.16 Phase Balance (Filter2)



MSL1

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Ordering Code

Ordering Code	Packing	Reel size	Status
G5QH942M5N2LN-J	Tape & Reel	5,000pcs.	MP
G5QH942M5N2LN-JA	Tape & Reel	less than 5,000 pcs.	MP
G5QH942M5N2LN-Y	Tape & Reel	15,000pcs	MP
G5QH942M5N2LN-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.