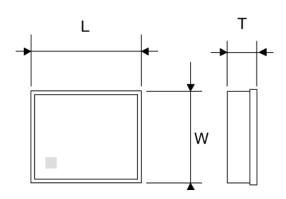
### **Spec Sheet**

# **SAW Filter**

# F6QB1G842P2BM



#### Features

- Item Summary GSM1800, 403
- Lifecycle Stage Mass Production
- Standard packaging quantity (minimum) Taping Embossed 5000 , 15000pcs

#### ■ Products characteristics table

Temperature Range	-30 to +85℃
GSM	1800
Use	GSM
Transmitting / Receiving	Rx Filter
Insertion Loss	1.8dB
Attenuation	15dB
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
Т	0.5mm max

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

Customer Name	Standard Specification	TAIYO YUDEN Mob	le Technology Co.,Ltd.
System	GSM1800 Rx (50/100ohm)	DATE	Apr. 2, 2012
Part Number	F6QB1G842P2BM	Version 1.0a	Final

**Table 1. Electrical specifications** 

Passband: 1805 ~ 1880 MHz						
14	Condition	Specification		11.20	Daniel	
Item	(MHz)	Min.	Тур.	Max.	Unit	Remarks
Insertion Loss	1805~1880	-	1.8	2.3	dB(*1)	
Ripple	1805~1880	-	0.8	1.5	dB	
Absolute	DC~1705	29	34	-	dB	
attenuation	1705~1785	11	15	-	dB	
	1920~1980	23	28	-	dB	
	1980~2400	24	28	-	dB	
	2400~2500	35	44	-	dB	
	2500~3000	25	33	-	dB	
	3000~6000	35	50	-	dB	
VSWR (Input)	1805~1880	-	1.8	2.2	-	
VSWR (Output)	1805~1880	-	1.8	2.2	-	
Amplitude Balance	4005 4000	-1.2	0.7/.0.7	.4.0	-ID	
S21 / S31	1805~1880	-1.2	-0.7/+0.7	+1.2	dB	
Phase Balance	1805~1880	-10	-5.0/+5.0	+10	dog	
(ФЅ21-ФЅ31)-180	1000~1000	-10	-5.0/+5.0	+10	deg.	
Input Impedance	Unbalanced		50		ohm	
Output Impedance	Balance	100//12nH		ohm		
Operating Tem	perature	-30 ~ +85		°C		

<sup>(\*1)</sup> Specification of insertion loss includes loss that comes from the test board. (0.15dB)





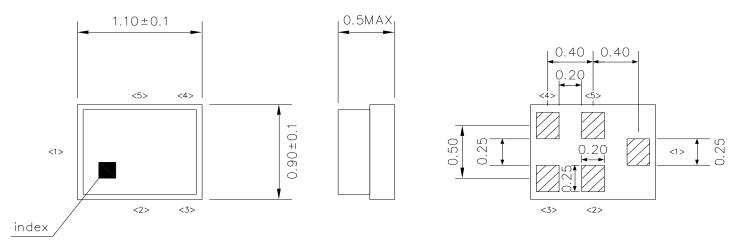


\*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile	Technology Co.,Ltd.
System	GSM1800 Rx (50/100ohm)	DATE	Apr. 2, 2012
Part Number	F6QB1G842P2BM	Version 1.0a	Final

#### **Dimensions**

Device size: 1.1typ. x 0.9typ. x 0.5max.

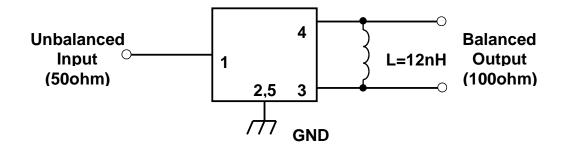


## **Pin Configuration**

Unit:	mm

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

### **Evaluation Circuit**



# **TAIYO YUDEN**





\*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobi	le Technology Co.,Ltd.
System	GSM1800 Rx (50/100ohm)	DATE	Apr. 2, 2012
Part Number	F6QB1G842P2BM	Version 1.0a	Final

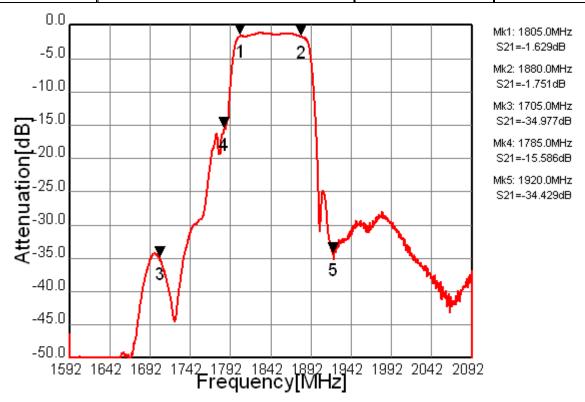


Fig.1 Pass-band Characteristics

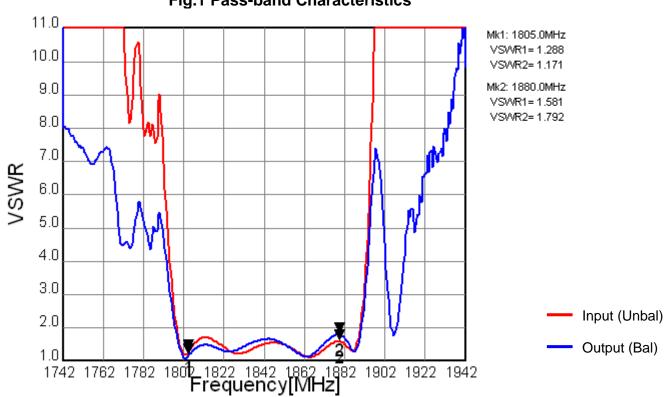


Fig.2 VSWR







\*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile	e Technology Co.,Ltd.
System	GSM1800 Rx (50/100ohm)	DATE	Apr. 2, 2012
Part Number	F6QB1G842P2BM	Version 1.0a	Final

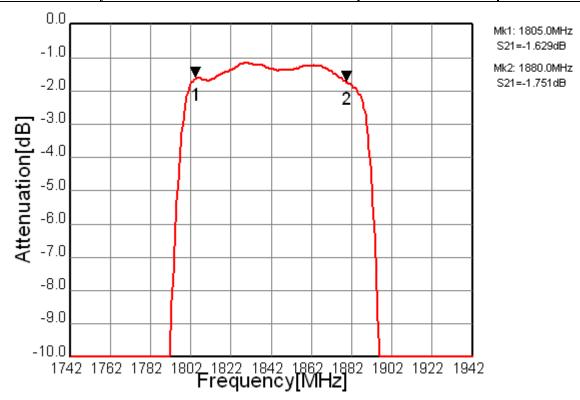


Fig.3 In-band Characteristics

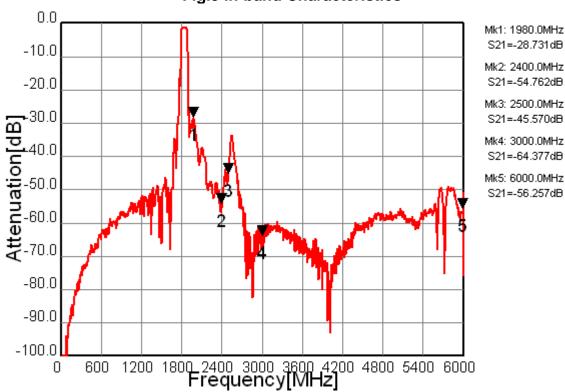


Fig. 4 Wide-band Characteristics







\*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile	Technology Co.,Ltd.
System	GSM1800 Rx (50/100ohm)	DATE	Apr. 2, 2012
Part Number	F6QB1G842P2BM	Version 1.0a	Final

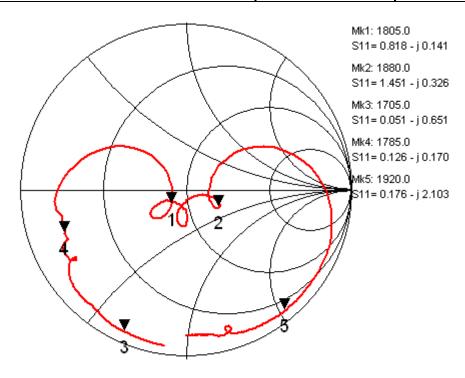


Fig. 5 Input Impedance (Unbalanced)

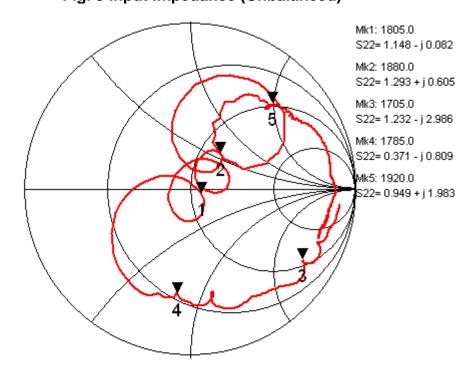


Fig.6 Output Impedance (Balanced)







\*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobile	e Technology Co.,Ltd.
System	GSM1800 Rx (50/100ohm)	DATE	Apr. 2, 2012
Part Number	F6QB1G842P2BM	Version 1.0a	Final

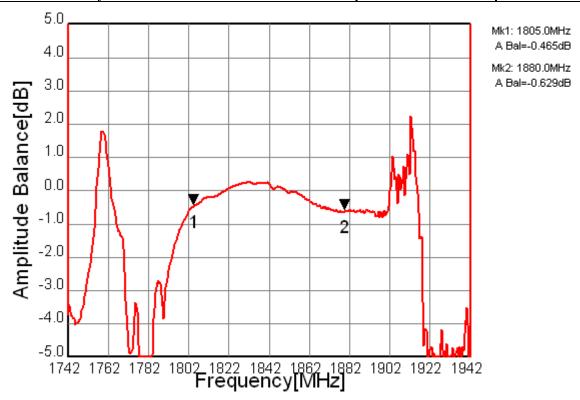


Fig. 7 Amplitude Balanced

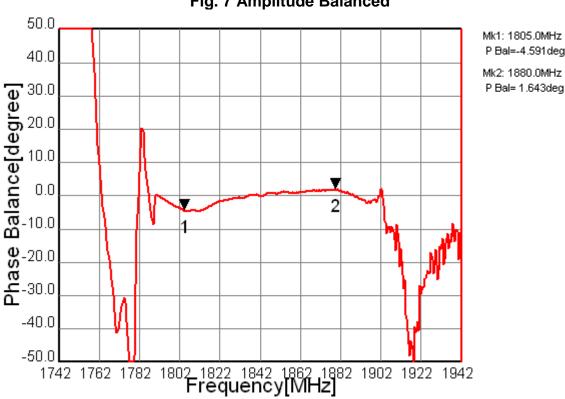


Fig.8 Phase Balanced







\*Pb Free part

Customer Name	Standard Specification	TAIYO YUDEN Mobi	le Technology Co.,Ltd.
System	GSM1800 Rx (50/100ohm)	DATE	Apr. 2, 2012
Part Number	F6QB1G842P2BM	Version 1.0a	Final

#### **Ordering Code**

Ordering Code	Packing	Reel size	Status
F6QB1G842P2BM-J	Tape & Reel	5,000 pcs.	MP
F6QB1G842P2BM-JA	Tape & Reel	less than 5,000 pcs.	MP
F6QB1G842P2BM-Y	Tape & Reel	15,000pcs	MP
F6QB1G842P2BM-Q	Bulk	few pcs.	MP

<sup>\*</sup>Minimum order quantity (MOQ) is assigned for each inquiry, Please contact to Sales Representatives..

#### **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.



<sup>\*</sup>MP: Mass Production