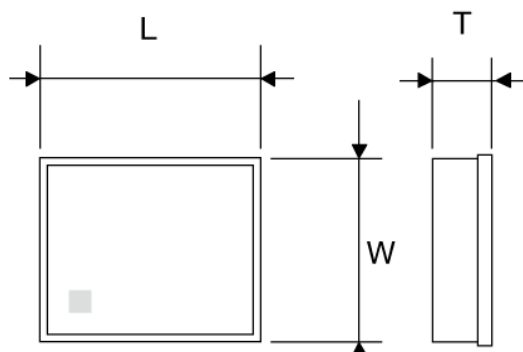


## SAW Filter

## FAR-F6KA-1G8425-D4CK



## ■ Features

- Item Summary  
GSM1800 , Rx, 504
- Lifecycle Stage  
Mass Production
- Standard packaging quantity (minimum)  
Taping Embossed 3000 , 15000pcs

## ■ Products characteristics table

Temperature Range	-30 to +85°C
GSM	1800
Use	GSM
Transmitting / Receiving	Rx Filter
Insertion Loss	2.1 dB
Attenuation	20dB
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	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	DCS-Rx (unbalance)	Date	March 31, 2010
Part Number	FAR-F6KA-1G8425-D4CK	Version 3.0c	

Table 1. Electrical specification

Passband: 1805 ~ 1880 MHz						
Item	Condition	Specification				Remarks
		Min.	Typ.	Max.	Unit	
Insertion Loss	1805 - 1880 MHz	-	2.1	2.5	dB	
Ripple	1805 - 1880 MHz	-	0.7	1.6	dB	
Absolute Attenuation	DC - 1300 MHz	28	31	-	dB	
	1300 - 1705 MHz	<u>27</u>	31	-	dB	
	1705 - 1785 MHz	9	20	-	dB	
	1920 - 1980 MHz	15	18	-	dB	
	1980 - 3000 MHz	23	28	-	dB	
	3000 - 6000 MHz	<u>18</u>	22	-	dB	
VSWR(Input)	1805 - 1880 MHz	-	2.2	2.7	-	
VSWR(Output)	1805 - 1880 MHz	-	2.4	2.9	-	
Input Impedance		50 //6.8nH			Ohm	
Output Impedance		50			Ohm	
Device size		1.4typ.x1.0typ.x0.5typ.			mm	
Operating temp.		-30 ~ +85			°C	



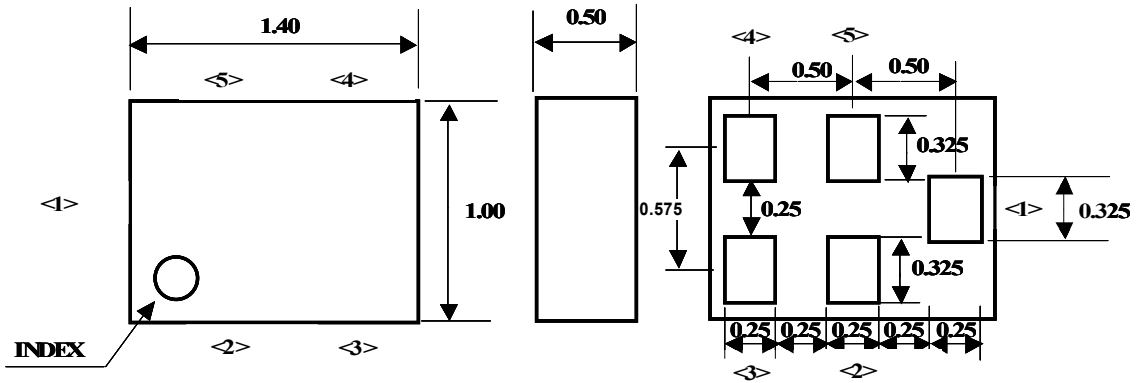
MSL1

\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	DCS-Rx (unbalance)	Date	March 31, 2010
Part Number	FAR-F6KA-1G8425-D4CK	Version 3.0c	

### Dimensions

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

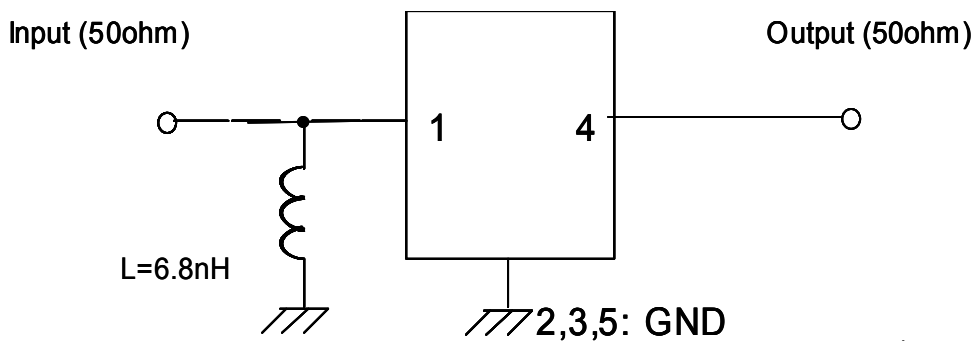


Unit: mm

### Pin Configuration

Pin No.	Symbol	Function
1	IN	Input pin
2	GND	Ground
3	GND	Ground
4	OUT	Output pin
5	GND	Ground

### Evaluation Circuit



1 ~ 5 : Pin No.



MSL1

\* Pb Free Part

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System	DCS-Rx (unbalance)	Date	March 31, 2010
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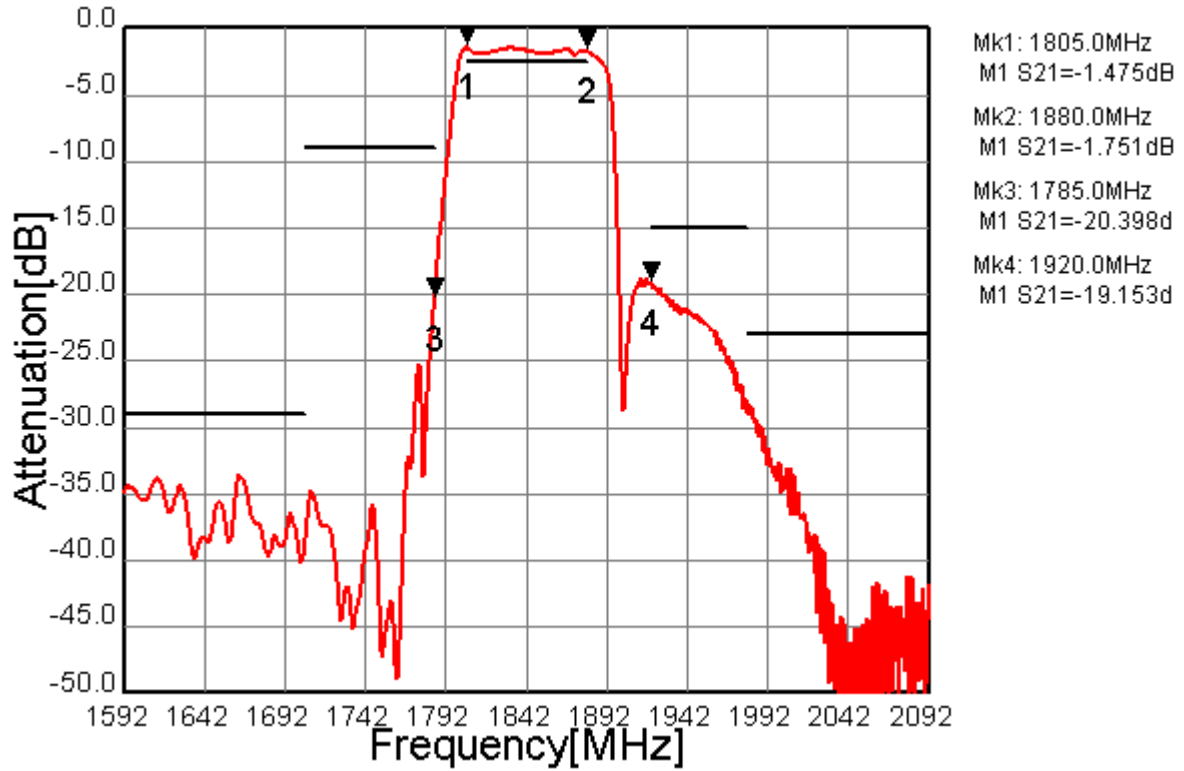


Fig.1 Pass-band Characteristic

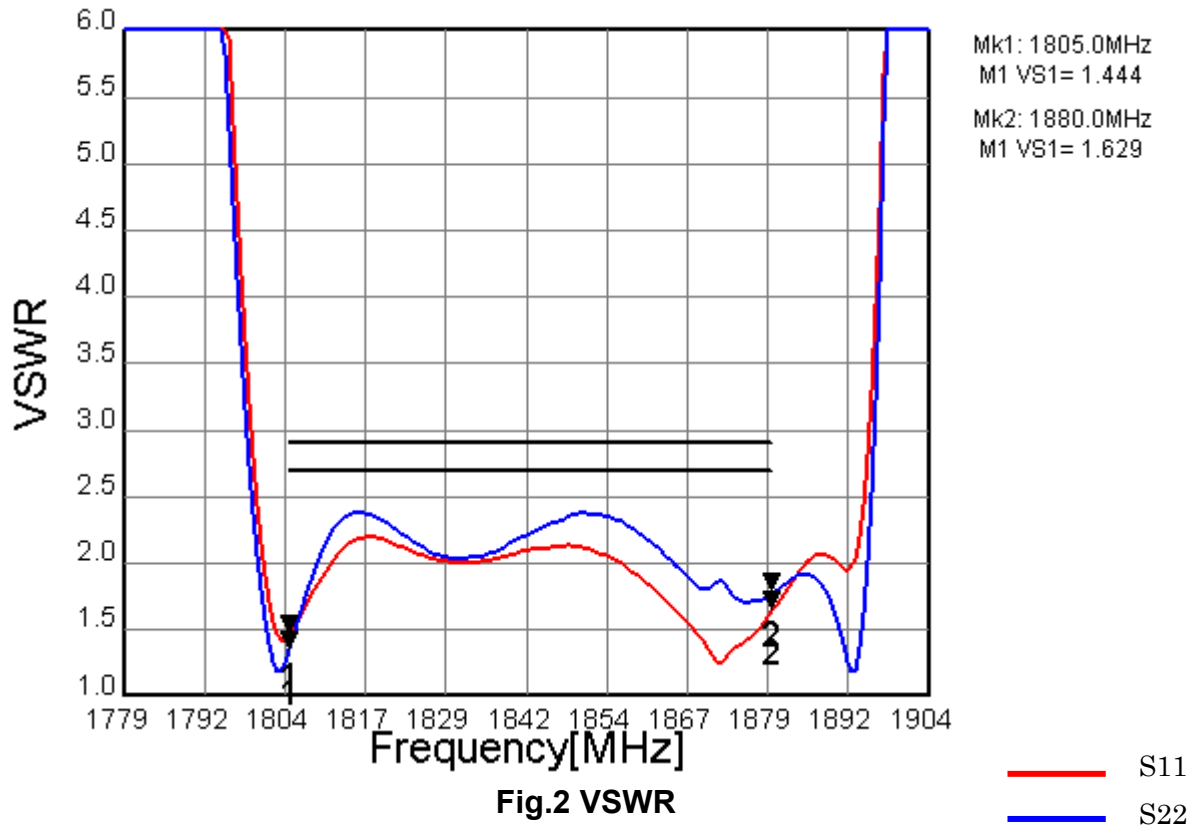


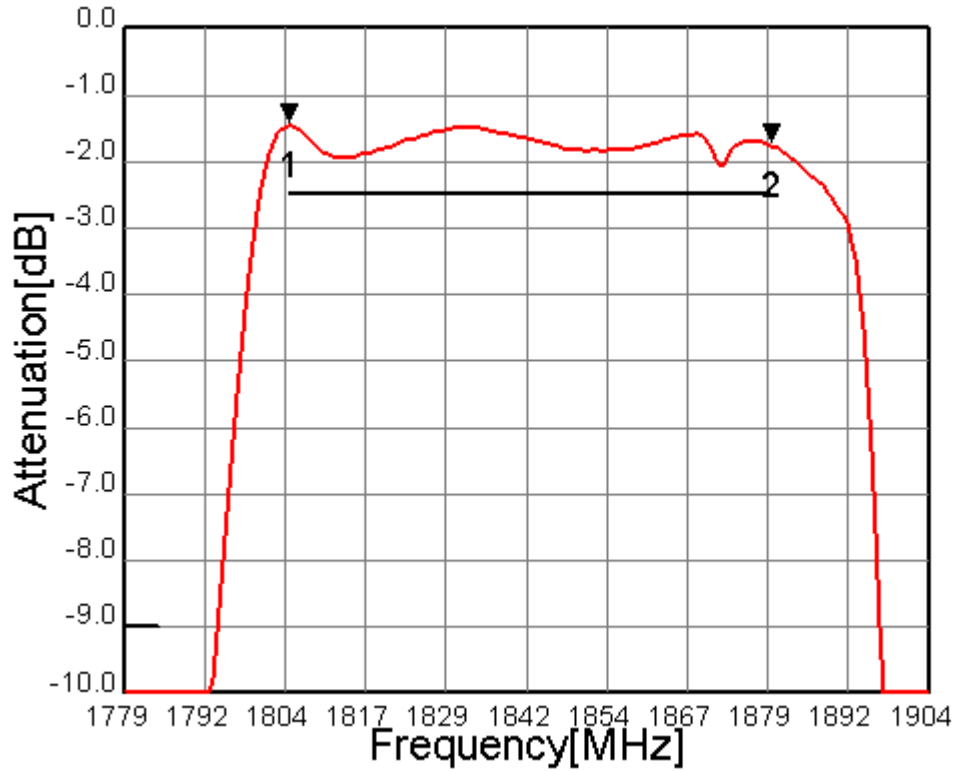
Fig.2 VSWR



MSL1

\* Pb Free Part

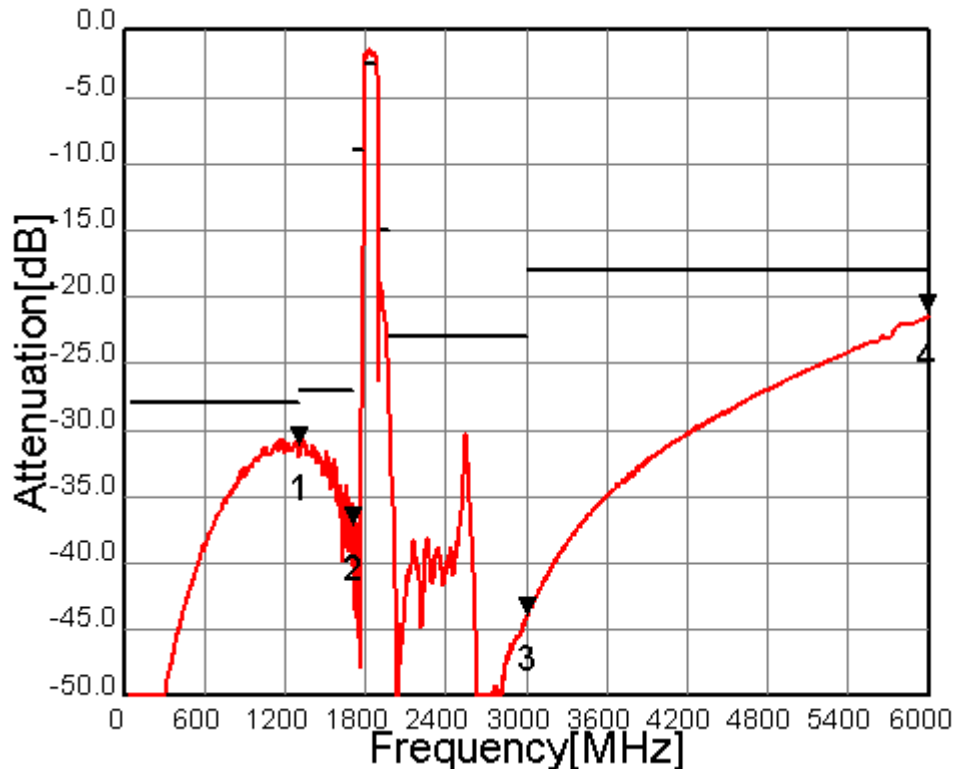
Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	DCS-Rx (unbalance)	Date	March 31, 2010
Part Number	FAR-F6KA-1G8425-D4CK	Version 3.0c	



Mk1: 1805.0MHz  
M1 S21=-1.475dB

Mk2: 1880.0MHz  
M1 S21=-1.751dB

Fig.3 In-band Characteristic



Mk1: 1300.0MHz  
M1 S21=-31.416d

Mk2: 1705.0MHz  
M1 S21=-37.376d

Mk3: 3000.0MHz  
M1 S21=-44.137d

Mk4: 6000.0MHz  
M1 S21=-21.501d

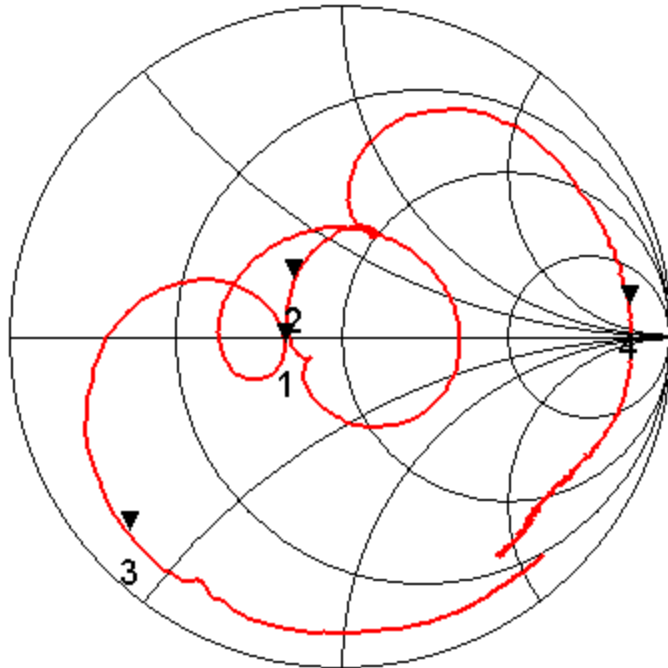
Fig.4 Wide-band Characteristic



MSL1

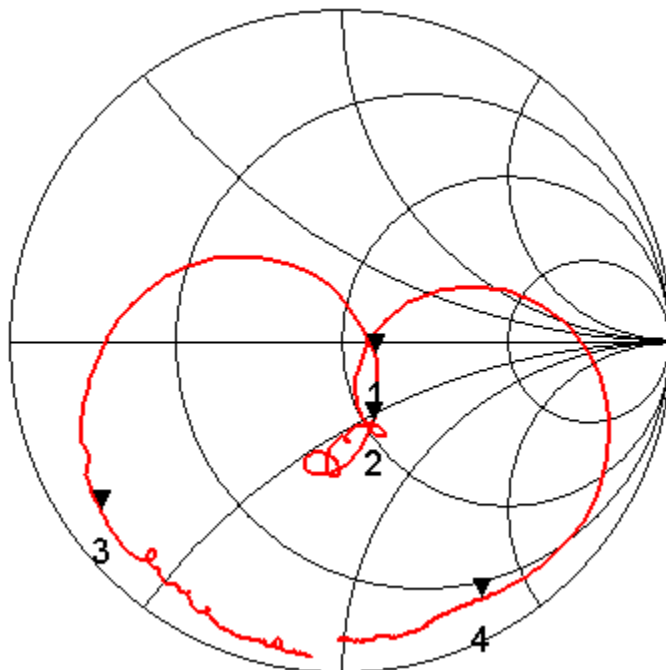
\* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	DCS-Rx (unbalance)	Date	March 31, 2010
Part Number	FAR-F6KA-1G8425-D4CK	Version 3.0c	



Mk1: 1805.0MHz  
 $S_{11} = 0.706 - j 0.035$   
 Mk2: 1880.0MHz  
 $S_{11} = 0.706 + j 0.260$   
 Mk3: 1785.0MHz  
 $S_{11} = 0.076 - j 0.390$   
 Mk4: 1920.0MHz  
 $S_{11} = 9.001 + j 7.180$

Fig.5 Input Impedance



Mk1: 1805.0MHz  
 $S_{22} = 1.223 - j 0.117$   
 Mk2: 1880.0MHz  
 $S_{22} = 1.066 - j 0.578$   
 Mk3: 1785.0MHz  
 $S_{22} = 0.064 - j 0.319$   
 Mk4: 1920.0MHz  
 $S_{22} = 0.229 - j 1.660$

Fig.6 Output Impedance