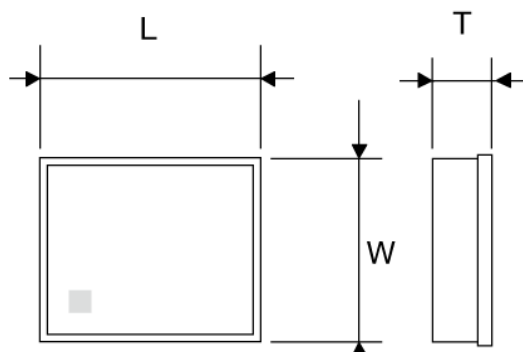


## SAW Filter

## FAR-F6KA-1G5859-D4MS



## ■ Features

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

## ■ Products characteristics table

Temperature Range	-30 to +85°C
Use	GPS
Insertion Loss	1.0/1.2dB
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.



\*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	March 31, 2010
Part Number	FAR-F6KA-1G5859-D4MS	Version 2.0b	

**Table 1.Electrical specifications**

Passband:1565.42 ~ 1605.886 MHz						
Parameter	Frequency	Specification			Unit	Remark
		Ver.2.0b				
		Min.	Typ.	Max.		
Operating temperature		-30	-	+85	°C	
Insertion loss	1574.42-1576.42 MHz	-	1.0	1.4	dB	*1
Insertion loss	1565.42-1585.42 MHz		1.2	1.8	dB	*1
Insertion loss	1597.5515-1605.886 MHz	-	1.2	1.8	dB	*1
VSWR(input/output)	1574.42-1576.42 MHz	-	1.3	2.0	-	
	1565.42-1585.42 MHz		1.5	2.0	-	
	1597.5515-1605.886 MHz	-	1.4	2.0	-	
Absolute Attenuation	10 – 925 MHz	32	35	-	dB	
	925 – 960 MHz	30	35	-	dB	
	1427 – 1463 MHz	35	44	-	dB	
	1710 – 1785 MHz	32	38	-	dB	
	1850 – 1910 MHz	37	43	-	dB	
	1920 – 1980 MHz	35	41	-	dB	
	2401 – 2483 MHz	36	49	-	dB	
	2500 – 2570 MHz	35	47	-	dB	
Input impedance		50			ohm	
Output impedance		50//18nH			ohm	
Device Size		1.4typ. x 1.0typ. x 0.5max.			mm	

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



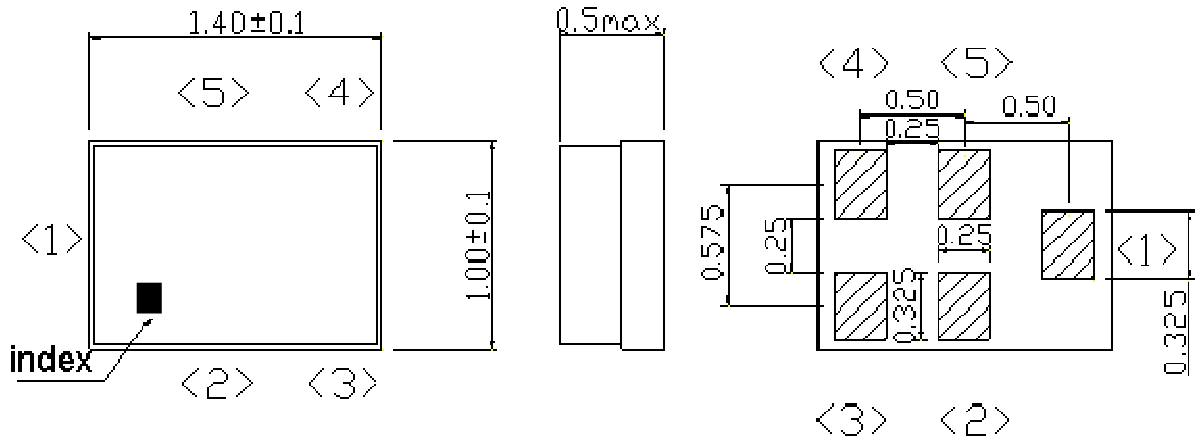
**RoHS** MSL1

\*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	March 31, 2010
Part Number	FAR-F6KA-1G5859-D4MS	Version 2.0b	

**Dimensions**

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

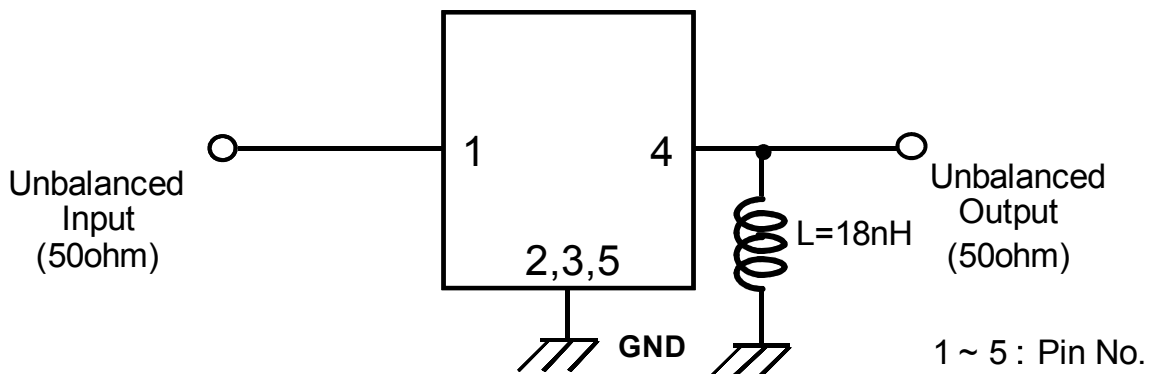


Unit : mm

**Pin Configuration**

Pin No.	Pin name	Description
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

**Evaluation Circuit**





**RoHS** MSL1

\*Pb Free part

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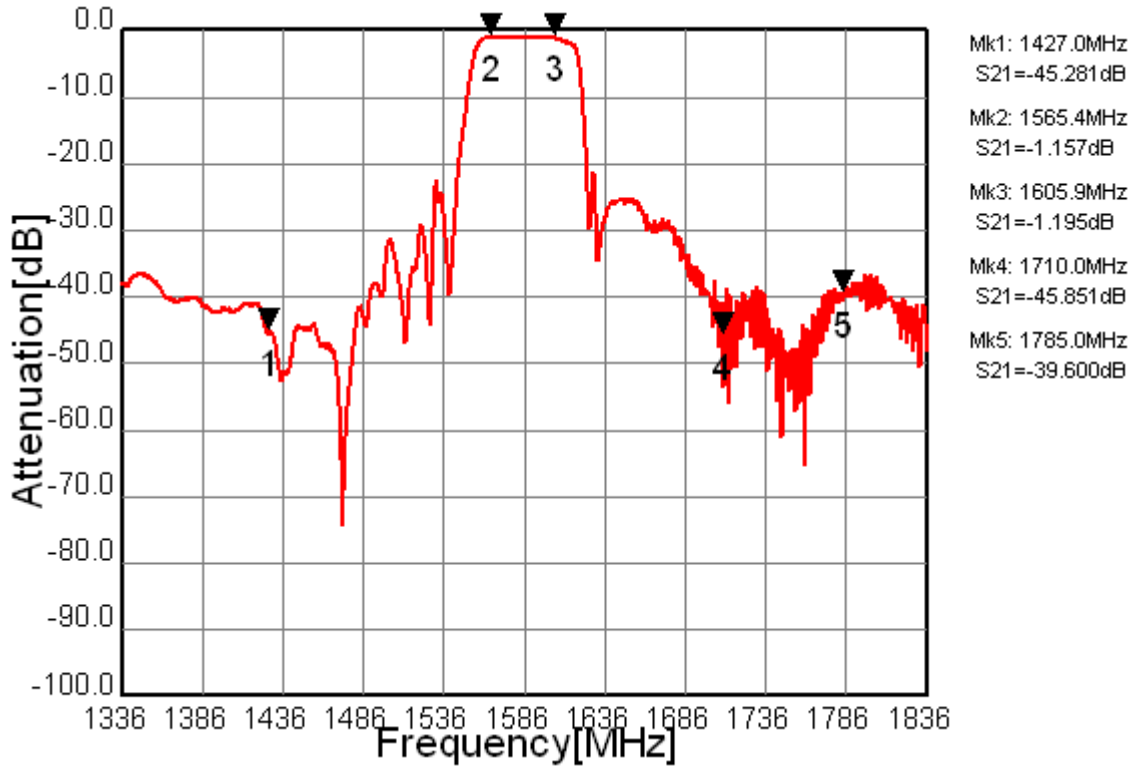


Fig.1 Pass-band Characteristics

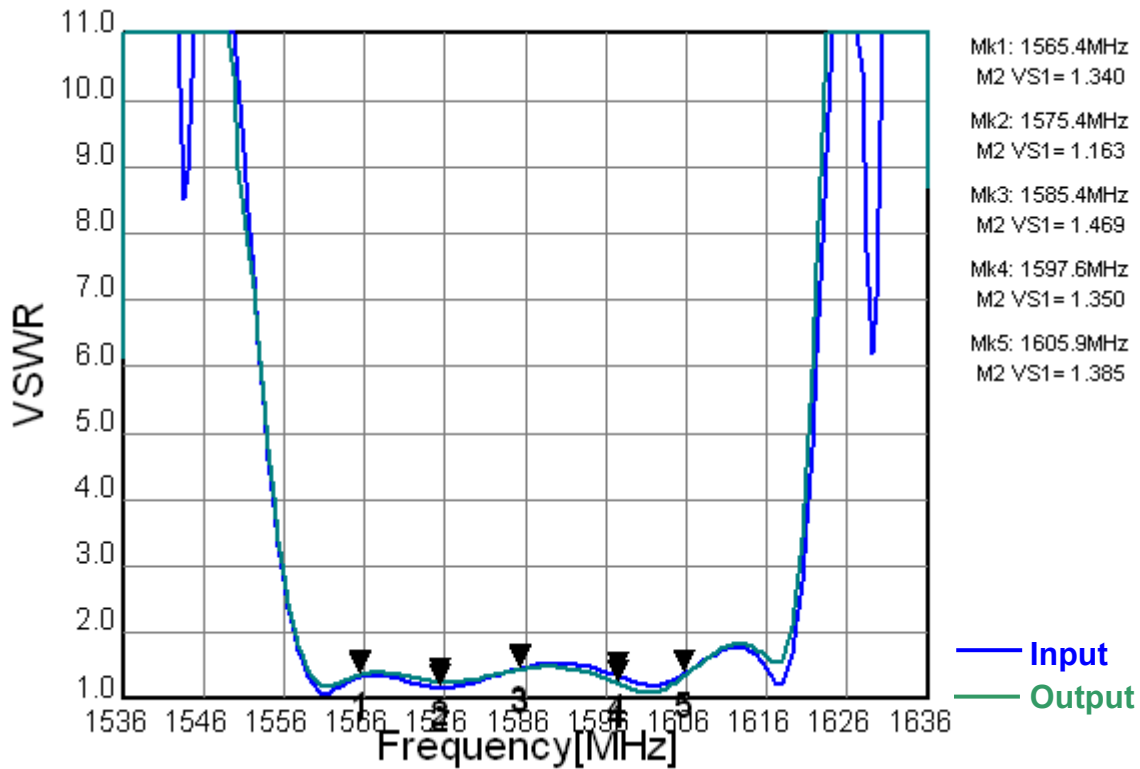


Fig.2 VSWR



**RoHS** MSL1

\*Pb Free part

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System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	March 31, 2010
Part Number	FAR-F6KA-1G5859-D4MS	Version 2.0b	

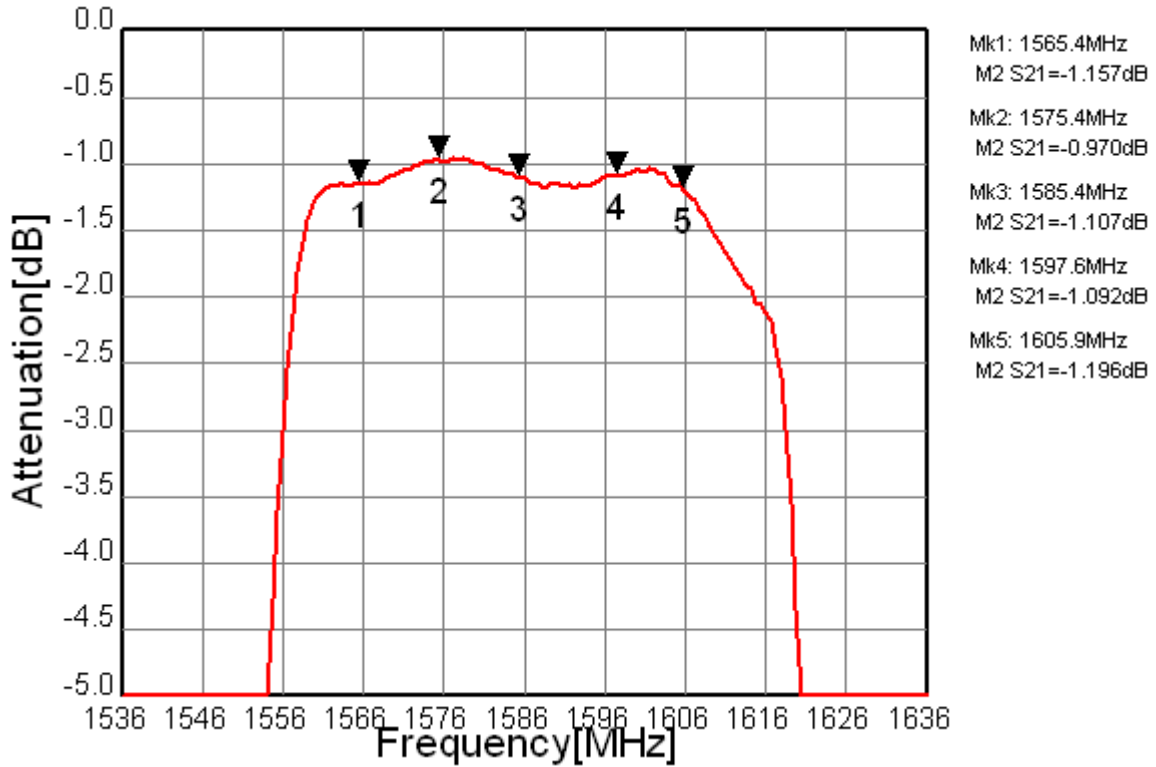


Fig.3 In-band Characteristics

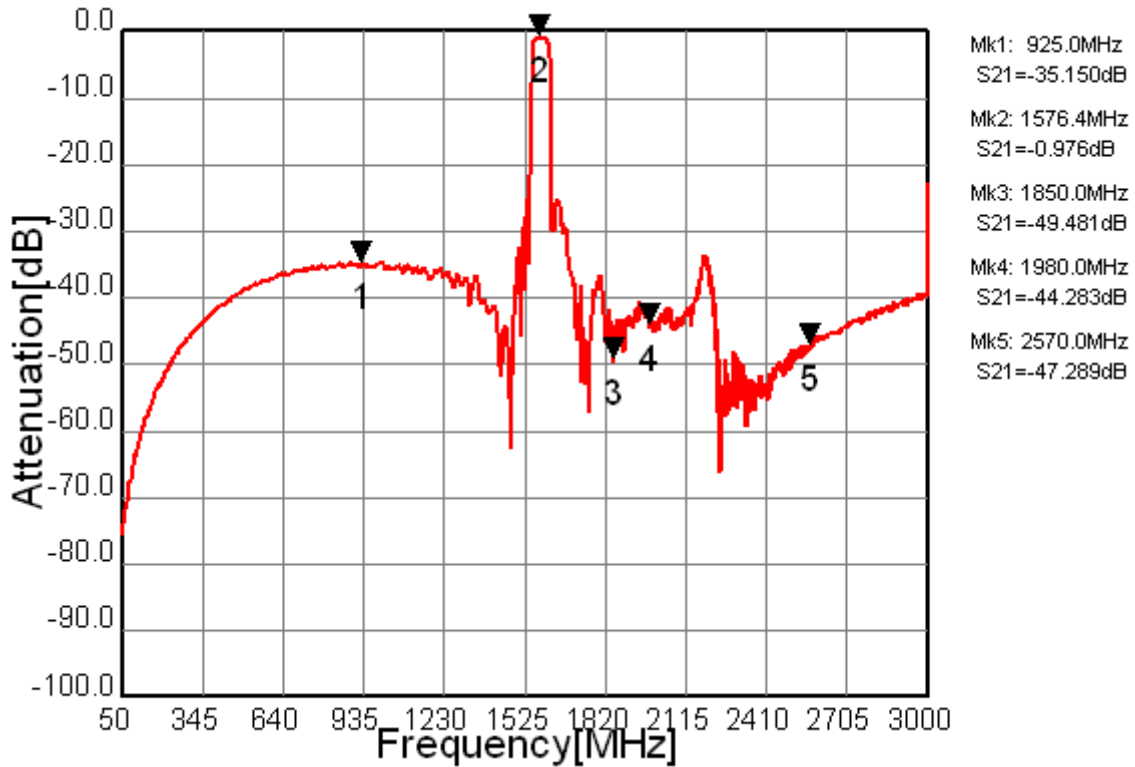
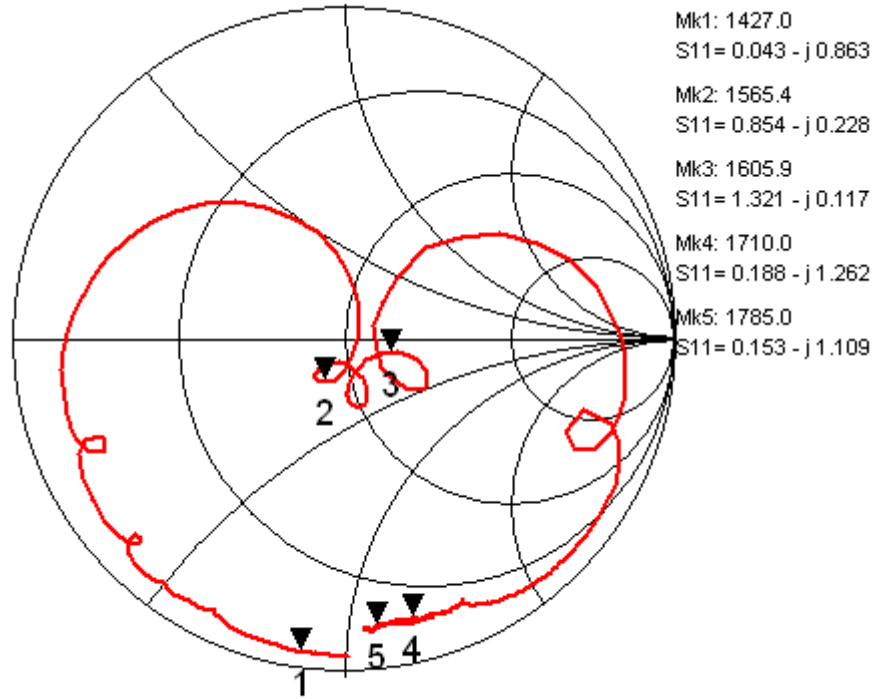


Fig.4 Wide-band Characteristics

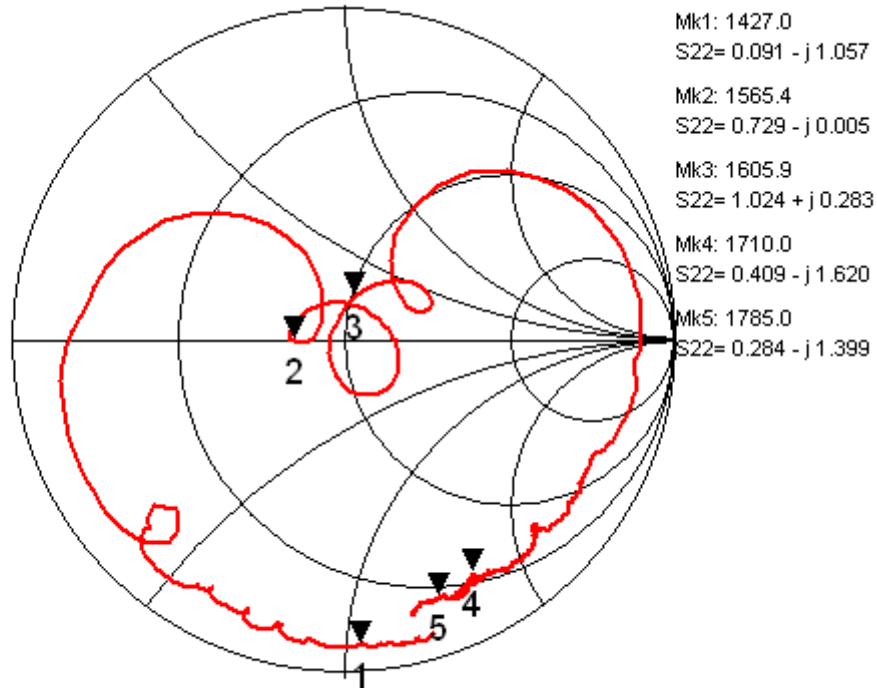


\*Pb Free part

Customer Name	Standard specifications	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	GPS+GLONASS (Unbalance 50/50 ohm)	Date	March 31, 2010
Part Number	FAR-F6KA-1G5859-D4MS	Version 2.0b	



**Fig.5 Input Impedance**



**Fig.6 Output Impedance**