Pb Ph-free   (**RoHS**)   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	

TAIYO YUDEN

MSL1

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

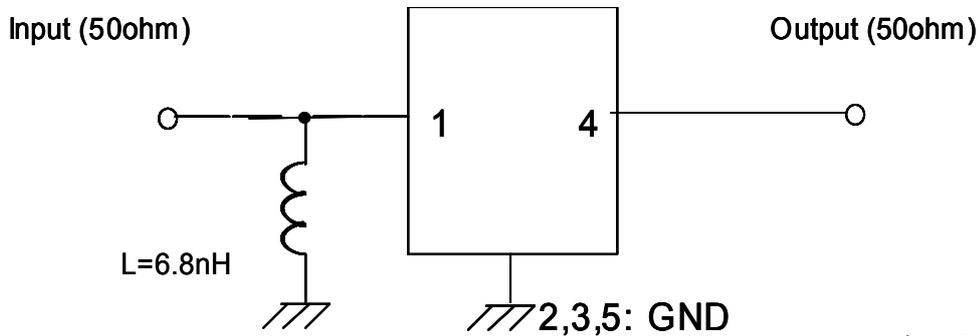Device size: 1.4typ. x 1.0typ. x 0.5typ.
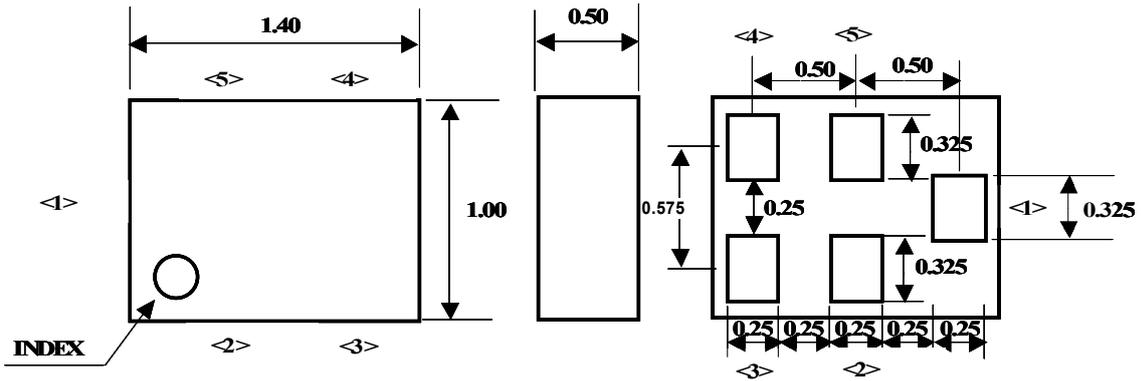
Unit: mm

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

Input (50ohm)

Output (50ohm)

1   4

L=6.8nH

2,3,5: GND

1 ~ 5 : Pin No.

TAIYO YUDEN

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Mk1: 1805.0MHz
M1 S21=-1.475dB

Mk2: 1880.0MHz
M1 S21=-1.751dB

Mk3: 1785.0MHz
M1 S21=-20.398d

Mk4: 1920.0MHz
M1 S21=-19.153d

Fig.1 Pass-band Characteristic

Mk1: 1805.0MHz
M1 VS1= 1.444

Mk2: 1880.0MHz
M1 VS1= 1.629

Fig.2 VSWR

——— S11
——— S22

TAIYO YUDEN

MSL1

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

TAIYO YUDEN

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
S11= 0.706 - j 0.035

Mk2: 1880.0MHz
S11= 0.706 + j 0.260

Mk3: 1785.0MHz
S11= 0.076 - j 0.390

Mk4: 1920.0MHz
S11= 9.001 + j 7.180

Fig.5 Input Impedance

Mk1: 1805.0MHz
S22= 1.223 - j 0.117

Mk2: 1880.0MHz
S22= 1.066 - j 0.578

Mk3: 1785.0MHz
S22= 0.064 - j 0.319

Mk4: 1920.0MHz
S22= 0.229 - j 1.660

Fig.6 Output Impedance

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