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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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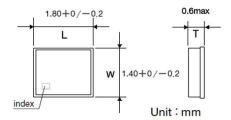




Spec Sheet

FBAR/SAW Devices (SAW Duplexers)

D6DA1G842K2C4



Features

- Item Summary
 SAW, Duplexer, 1.8x1.4x0.6mm
 Band 3
- Lifecycle Stage
 Mass Production
- Standard packaging quantity (minimum)
 Taping Embossed 3000, 15000pcs

Products characteristics table

System	LTE
Туре	SAW
Function	Duplexer
band	Band 3
Insertion Loss (typ) (Tx-ANT/ANT-Rx)	2.3/2.1 dB
Isolation (typ)	56/56 dB
Operating Temp. Range	-20 to +85 ℃
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

■ External Dimensions

Dimension L	1.8 + 0/- 0.20 mm
Dimension W	1.4 + 0/- 0.20 mm
Dimension T	Max 0.6 mm

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.



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd	
System	Band 3 Duplexer	Date	May 31, 2016
Part Number	D6DA1G842K2C4	Version 7.1ffC	Final

Table 1. Electrical Specification

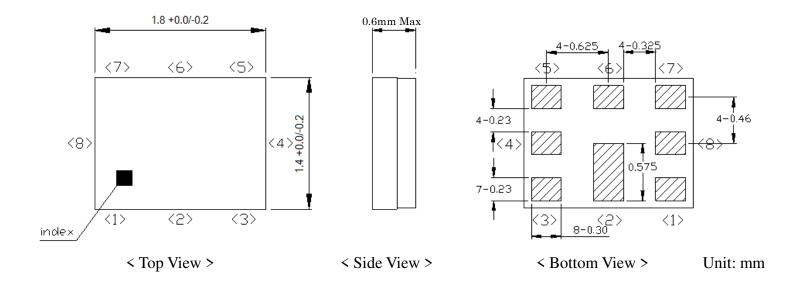
Itam			Condition	S	pecification	n	11.7	5 1
	Item		(MHz)	Min	Тур.	Max	Unit	Remarks
			4740 45 4704 05	-	2.3	3.0	dB(*1)	-20°C~ +65°C
	Inserti	on loss	1710.15~1784.85	-	-	3.3	dB(*1)	+65°C~ +85°C
	Rip	pple	1710.15~1784.85	-	1.6	2.8	dB	
		Tx		-	1.4	2.0	-	
	VSWR	Ant	1710.15~1784.85	-	1.4	2.0	-	
Tx to	Input	Power	1710.15~1784.85		IBm,Ta=+ 5000h,CV		dBm	
Ant			1559~1586	36	44	-	dB	Compass,GPS
			1597~1606	33	43	-	dB	GLONASS
	Abs	olute	1805~1880	40	52	-	dB	Rx
	atten	uation	2400~2500	33	39	-	dB	ISM
			3420~3570	25	32	-	dB	2f0
			5130~5355	20	30	-	dB	3f0
	l	1	4005 45 4070 05	-	2.1	2.9	dB(*1)	0°C~ +85°C
	inserti	on loss	1805.15 ~1879.85	-	-	3.3	dB(*1)	-20°C~ 0°C
	Rip	ple	1805.15 ~1879.85	-	1.4	2.8	dB	
Ant	VSWR	Ant	1805.15 ~1879.85	-	1.6	2.3	-	
to	VOVIIX	Rx	1005.15 1075.05	-	1.5	2.2	-	
Rx			1710~1785	50	54	-	dB	Тх
	Abs	olute	2400~2500	42	45	-	dB	ISM
	atten	uation	3610~3760	47	57	-	dB	2f0
			5415~5640	42	49	-	dB	3f0
Tx			1710.15~1784.85	50	56	-	dB	Тх
to	Isola	ation	1805.15 ~1879.85	46	-	-	dB	Rx -20°C~ 0°C
Rx			1003.13 ~ 101 3.03	50	56	-	dB	Rx +0 °C~ +85°C
	Terminating Impedance Rx port		Tx port		50 //10nH		Ω	
Tern			Rx port		50 //12nH		Ω	
			Ant port		50 //4.3nF	ł	Ω	
	Ор	erating Ter	mperature		-20 to +85)	۰C	
	Max	kimum DC	in all ports	-	-	3	VDC	
	DC	impedance	to ground		100		MΩ	Device only
	Device size (L typ. x W typ. x H max.)		W typ. x H max.)	1.	8 x 1.4 x ().6	mm	

^(*1) Specification of insertion loss excludes loss that comes from the test board.



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Dimensions



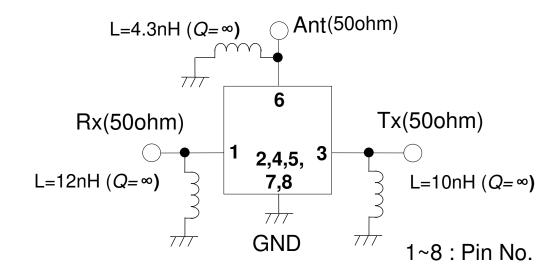
Pin assignment

Pin No.	Pin name	Description
1	Rx	Receiver
2	GND	Ground
3	Tx	Transmitter
4	GND	Ground
5	GND	Ground
6	ANT	Antenna
7	GND	Ground
8	GND	Ground

Figure 1. Dimensions and Pin assignment

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Evaluation Circuit



Recommended foot print pattern

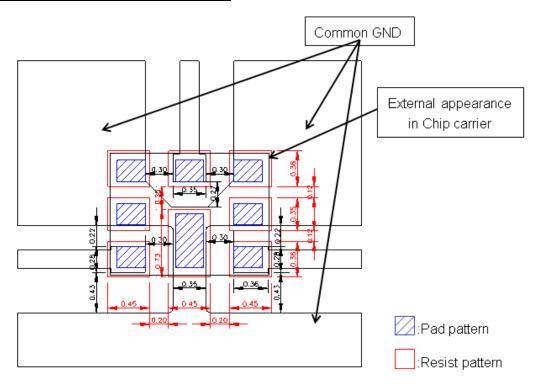
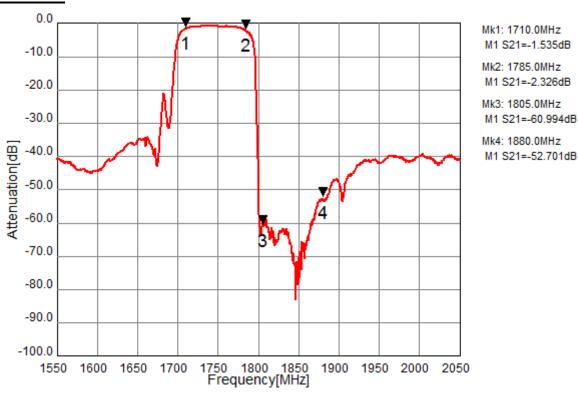


Figure 2. Recommended foot print pattern



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Tx to Ant



Ant to Rx

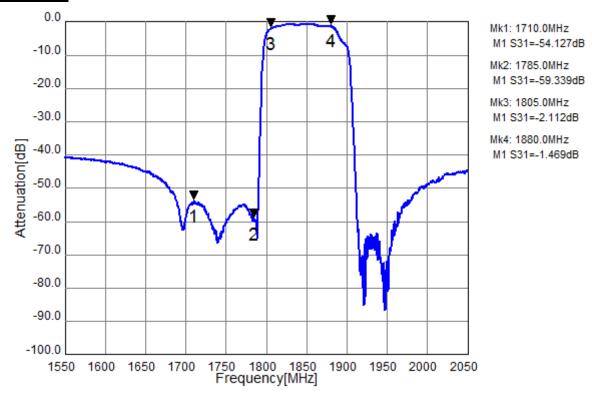


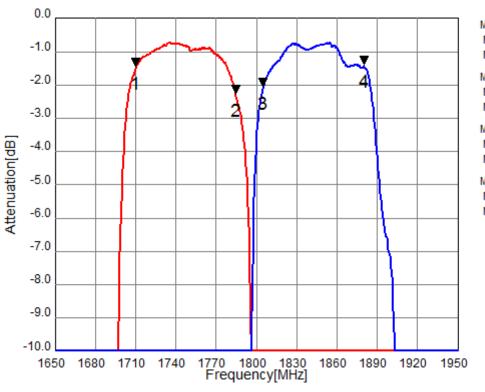
Figure 3-1. Electrical Characteristics

These data exclude loss that comes from the test board.



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Tx to Ant, Ant to Rx



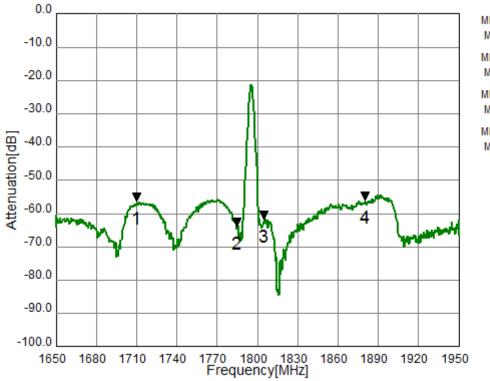
Mk1: 1710.0MHz M1 S21=-1.535dB M1 S31=-54.127dB

Mk2: 1785.0MHz M1 S21=-2.326dB M1 S31=-59.339dB

Mk3: 1805.0MHz M1 S21=-60.994dB M1 S31=-2.112dB

Mk4: 1880.0MHz M1 S21=-52.701dB M1 S31=-1.469dB

Tx to Rx Isolation



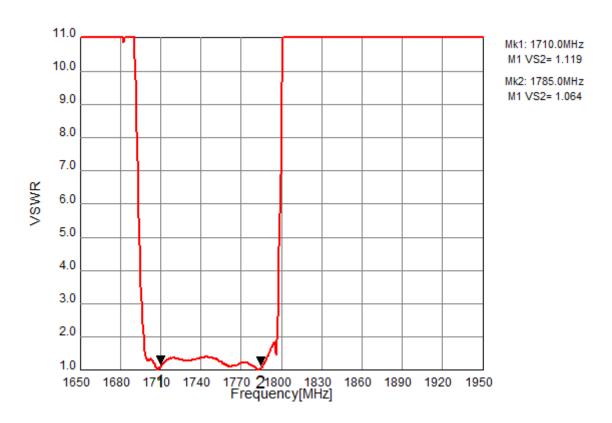
Mk1: 1710.0MHz M1 S32=-57.179dB Mk2: 1785.0MHz M1 S32=-64.548dB Mk3: 1805.0MHz M1 S32=-62.645dB Mk4: 1880.0MHz M1 S32=-56.747dB

Figure 3-2. Electrical Characteristics

These data exclude loss that comes from the test board.

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System	Band 3 Duplexer	Date	May 31, 2016	
Part Number	D6DA1G842K2C4	Version 7.1ffC	Final	

Tx Port



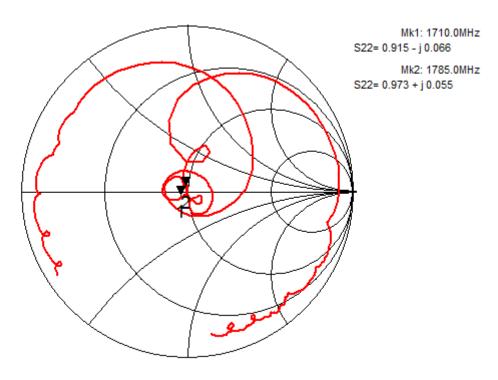
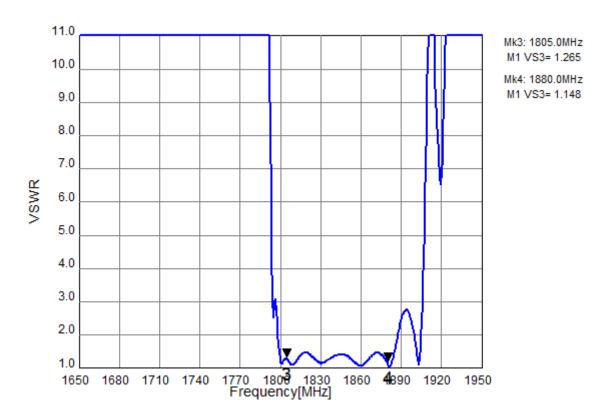


Figure 3-3. Electrical Characteristics

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd		
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Rx Port



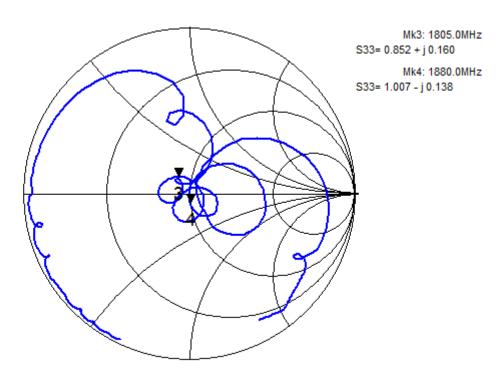
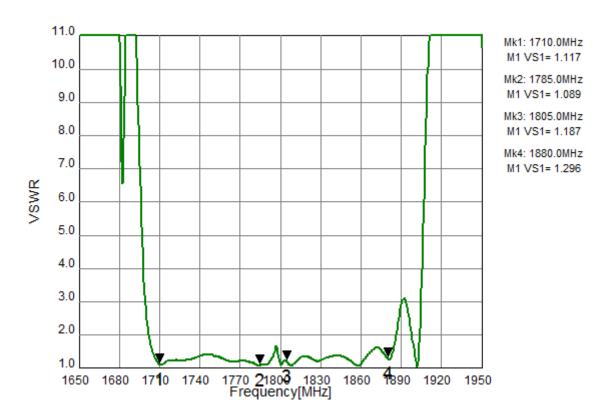


Figure 3-4. Electrical Characteristics

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Ant Port



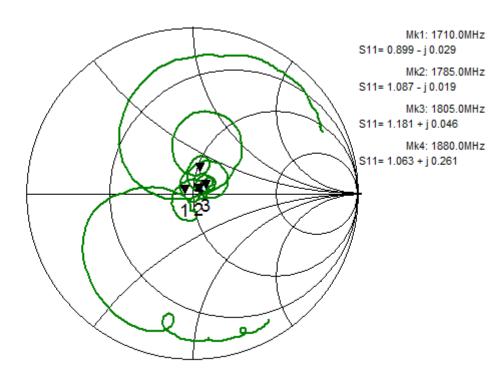
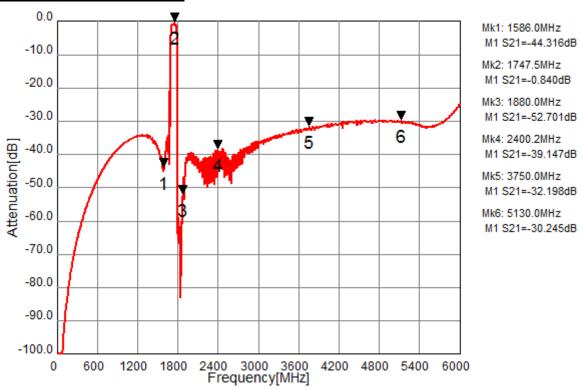


Figure 3-5. Electrical Characteristics



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Tx to Ant (Wide span)



Ant to Rx (Wide span)

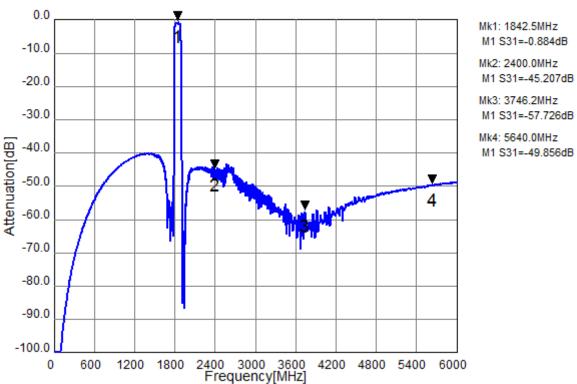


Figure 3-6. Electrical Characteristics



Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.		
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Part Number	D6DA1G842K2C4	Version 7.1ffC	Final	

Tx to Rx Isolation(Wide span)

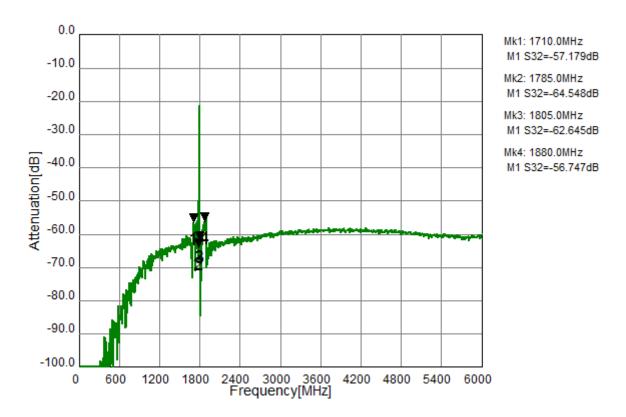


Figure 3-7. Electrical Characteristics



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Ordering Code

Ordering Code	Packing	Reel size	Status
D6DA1G842K2C4-Z	Tape & Reel	3,000 pcs.	MP
D6DA1G842K2C4-ZA	Tape & Reel	less than 3,000 pcs.	MP
D6DA1G842K2C4-Y	Tape & Reel	15,000 pcs.	MP
D6DA1G842K2C4-YA	Tape & Reel	less than 15,000 pcs.	MP
D6DA1G842K2C4-Q	Bulk	few pcs.	MP

^{*}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.

^{*}MP: Mass Production