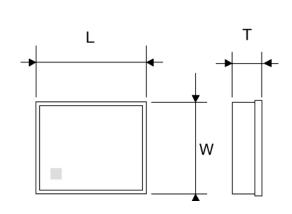
Spec Sheet

SAW Duplexer D6PE1G960P3BP



Features

- Item Summary
- W-CDMA / CDMA, 806
- Lifecycle Stage
- Mass Production
- Standard packaging quantity (minimum)
- Taping Embossed 3000 , 15000pcs

Products characteristics table

Temperature Range	-30 to +85℃
Band(3GPP)	В2
Band(3GPP2)	BC1
Use	WCDMA / CDMA
Transmitting / Receiving	Duplexer
Insertion Loss	2.3/3.0dB
Attenuation	56/52dB
RoHS Compliance	Yes
Halogen Free	Yes
Soldering Method	Reflow

External Dimensions

L	2mm +0.1:-0.1
W	1.6mm +0.1:-0.1
т	0.57mm 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. 2015.06.03



PD-free * Pb Free Part

Customer Name	Standard	TAIYO YUDEN Ma	bile Technology Co.,Ltd.
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

ltem		Condition (MHz)		Specification		Unit	Remarks	
				Min.	Тур.	Max.		
Tx	Insertion los	S	1850.48~1909.52	-	2.3	3.0		-20 to +85 ℃
to			1850.6~1909.4	-	2.3	3.0	dB (*1)	
ANT	Ripple		1850.48~1909.52	-	1.0	2.0	dB	
	VSWR	ANT	4050 40 4000 50	-	1.7	2.0	-	
		Tx	1850.48~1909.52	-	1.8	2.1	-	
	Absolute atte	enuation	1570~1580	42	46	-	dB	
			1930.48~1989.52	44	51	-	dB	-20 to +85 °C
			1930.6~1989.4	40	51	-	dB	
			3700~3820	21	27	-	dB	
			5550~5730	15	19	-	dB	
			1850.48~1909.52	+29	+29dBm,Ta=+50ºC 50kh,CW		dBm	
ANT	Insertion loss		1930.48~1989.52	-	3.0	3.5		-20 to +85 ℃
to			1930.6~1989.4	-	3.0	3.5	dB (*1)	2010 000 0
Rx	Ripple		1930.48~1989.52	-	1.4	2.2	dB	
	Phase balance		1930.48~1989.52	-13	-7/+4	+13	deg	
	Amplitude ba		1930.48~1989.52	-1.5	-0.6/+0.2	+1.5	dB	
	VSWR	ANT		-	1.6	2.0	-	
		Rx	1930.48~1989.52	-	1.9	2.2	-	
	Absolute atte	enuation	1850.48~1909.52	45	53	-	dB	-20 to +85 ℃
			1850.6~1909.4	45	53	-	dB	
Tx to	Isolation		1850.48~1909.52	52	56	-	dB	-20 to +85 ℃
Rx			1850.6~1909.4	52	56	-	dB	
			1930.48~1989.52	48	52	-	dB	-20 to +85 ℃
			1930.6~1989.4	46	52	-	dB	
Triple	Triple beat		1931.25~1988.75	-	-80	-	dBc	+22dBm@Tx port -27dBm@Ant port
Termir	nating Impeda	nce	Tx port		50		Ohm	Single-ended
	- •		Rx port	1	100 // 22nH	1	Ohm	Balanced
		Ant port	50 // 3.9nH		Ohm	Single-ended		
Opera	ting Temperat	ure	• •		-30 to +85		٥C	Ŭ
	e size (LxWxH			2.0	x 1.6 x 0.57		mm	

Table 1. Electrical Specification

(*1) Specification of insertion loss excludes loss that comes from the test board. (approximately 0.15dB.)

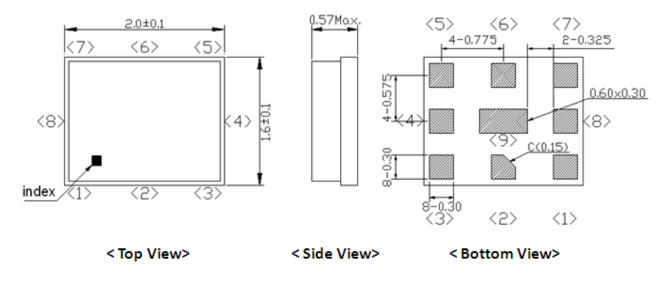
Pb-free	

RoHS MSL1

* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd		
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012	
Part Number	D6PE1G960P3BP	Version 4.0cd	Final	

Dimensions



Unit: mm

Pin Configuration

Pin No.	Pin name	Description
1	Rx	Receiver Pin (balanced)
2	GND	Ground Pin
3	Тx	Transmitter Pin
4	GND	Ground Pin
5	GND	Ground Pin
6	ANT	Antenna Pin
7	GND	Ground Pin
8	Rx	Receiver Pin (balanced)
9	GND	Ground Pin

Figure 1. Dimensions and Pin assignment

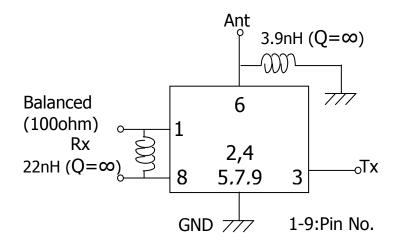


RoHS MSL1

* Pb Free Part

Customer Name	Standard		obile Technology Co.,Ltd.
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Evaluation Circuit



Recommended foot print pattern

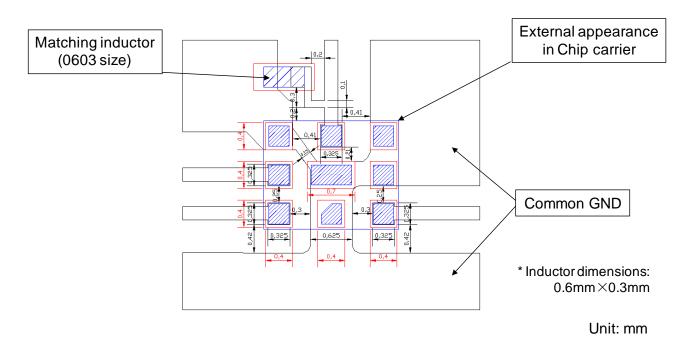


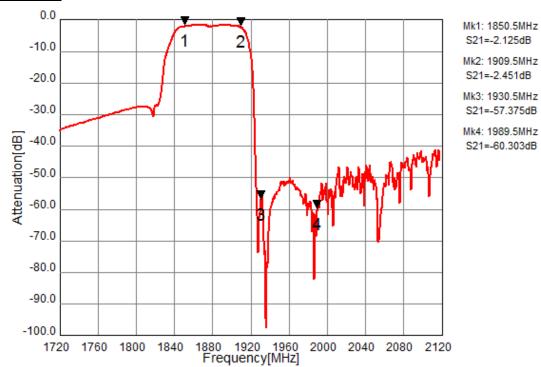
Figure 2. Recommended foot print pattern

RoHS) MSL1

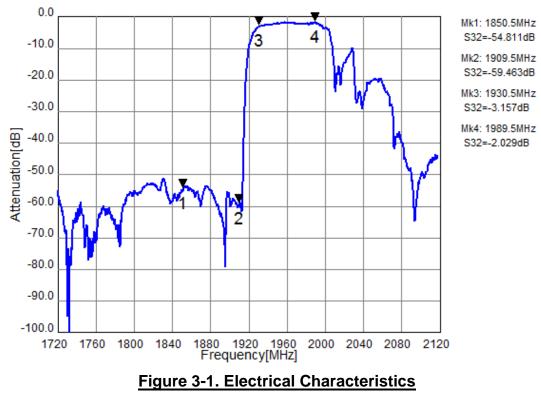
* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Ma	bile Technology Co.,Ltd.
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Tx to Ant







These data include loss that comes from the test board. (Approximately 0.15dB.)

(\mathbf{Pb})	
Pb-free	

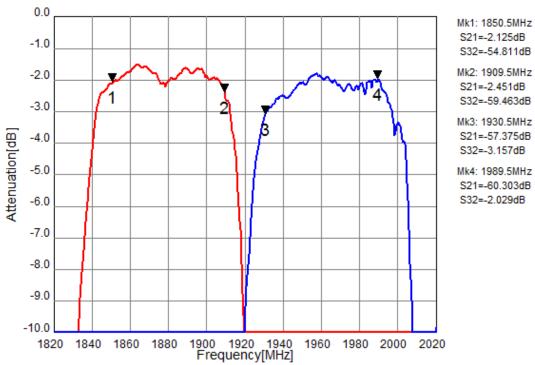
 \square

RoHS) MSL1

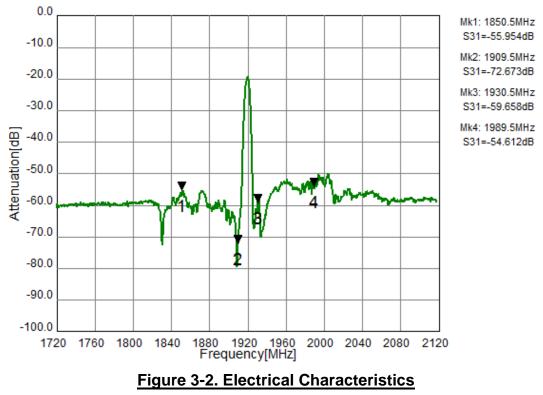
* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Ma	bile Technology Co.,Ltd.
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Tx to Ant, Ant to Rx



Tx to Rx Isolation



These data include loss that comes from the test board. (Approximately 0.15dB.)

RoHS MSL1

* Pb Free Part

Customer Name	Standard	TAIYO YUDEN M	obile Technology Co.,Ltd.
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Tx Port

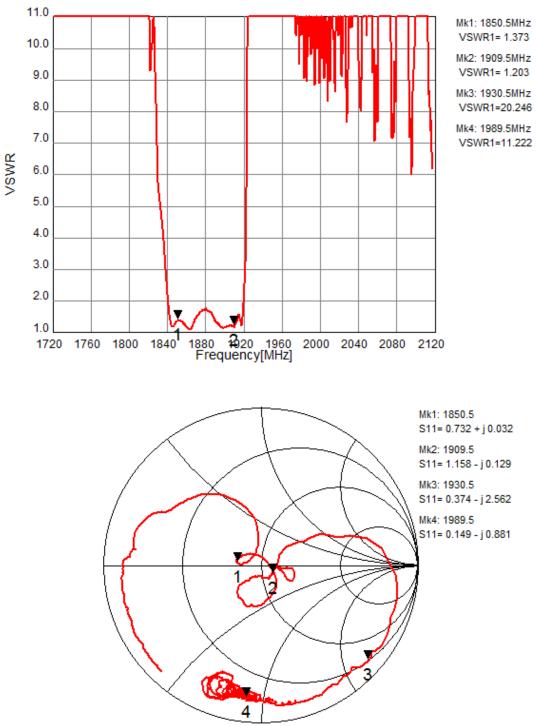


Figure 3-3. Electrical Characteristics



* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Rx Port

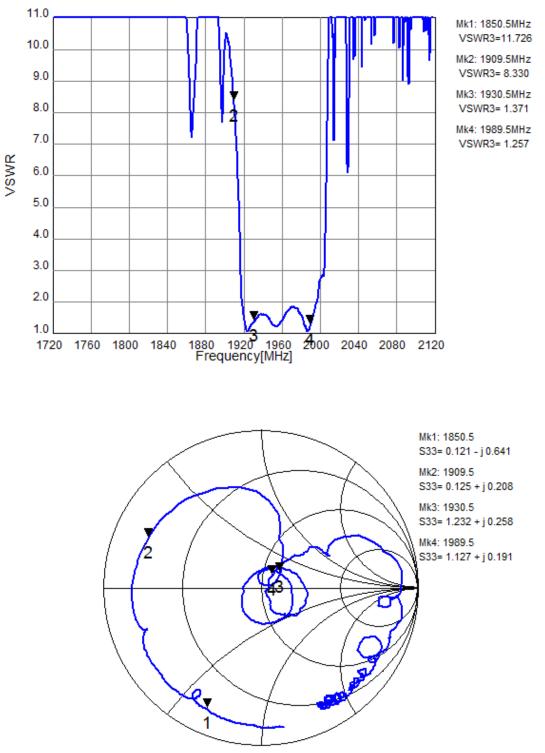


Figure 3-4. Electrical Characteristics



PD-Tree * Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Ant Port

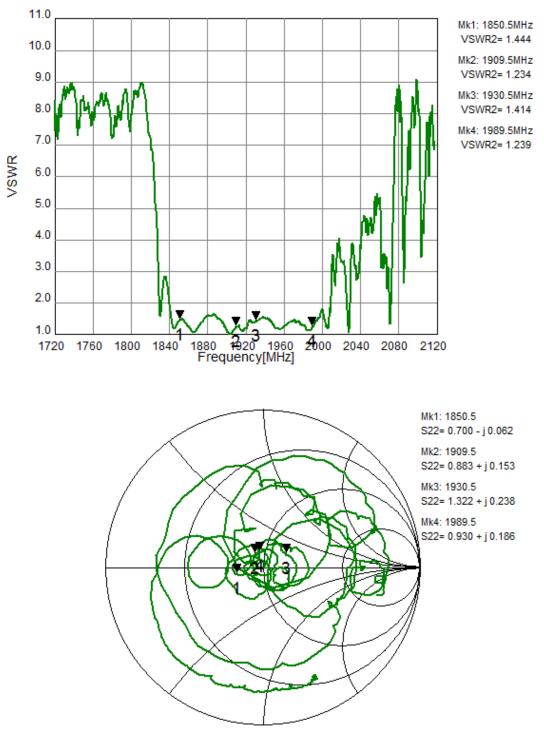


Figure 3-5. Electrical Characteristics

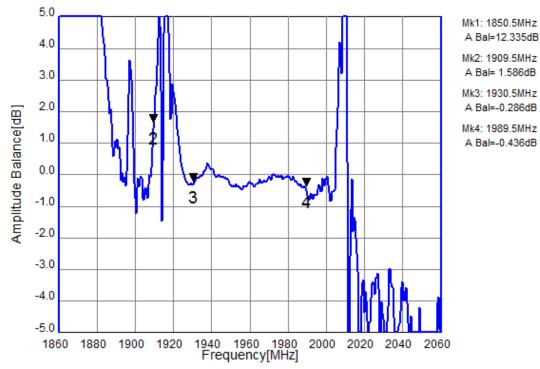
Pb	
Pb-free	



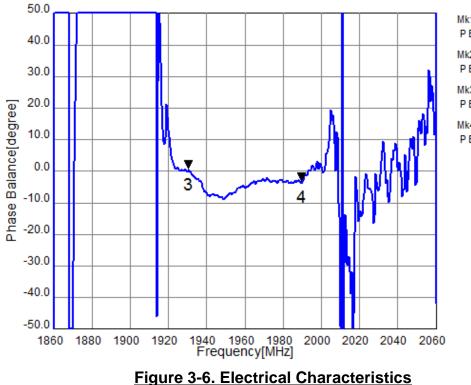
* Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Ant to Rx (Amplitude balance)



Ant to Rx (Phase balance)



Mk1: 1850.5MHz P Bal=230.100deg

Mk2: 1909.5MHz P Bal=150.873deg

Mk3: 1930.5MHz P Bal= 0.024deg

Mk4: 1989.5MHz P Bal=-3.670deg

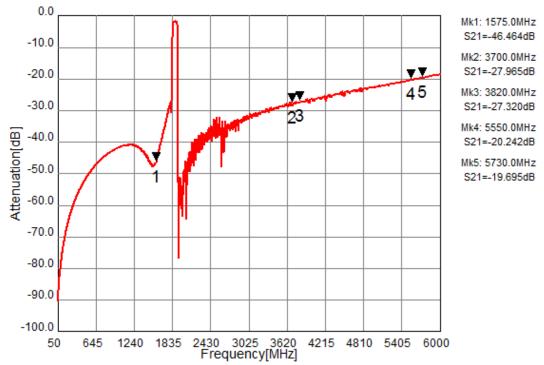
	E	b
	Pb-	free
'		



PD-Tree * Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.		
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012	
Part Number	D6PE1G960P3BP	Version 4.0cd	Final	

Tx to Ant (Wide span)



Ant to Rx (Wide span)

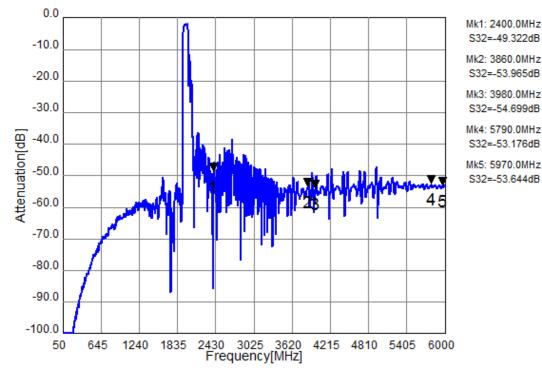


Figure 3-7. Electrical Characteristics

Pb	
Pb-free	



<u>* Pb Free Part</u>

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	W-CDMA Band II / CDMA2000 BC 1 Duplexer	Date	May 14, 2012
Part Number	D6PE1G960P3BP	Version 4.0cd	Final

Ordering Code

Ordering Code	Packing	Reel size	Status
D6PE1G960P3BP-Z	Tape & Reel	3,000 pcs.	MP
D6PE1G960P3BP-ZA	Tape & Reel	less than 3,000 pcs.	MP
D6PE1G960P3BP-Y	Tape & Reel	15,000 pcs.	MP
D6PE1G960P3BP-YA	Tape & Reel	less than 15,000 pcs.	MP
D6PE1G960P3BP-Q	Bulk	few pcs.	MP

*Minimum order quantity (MOQ) is assigned for each inquiry, Please contact to Sales Representatives. *MP: Mass Production

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.