



e Part

Customer Name	Standard	TAIYO YUDEN Mob	ile Technology Co.,Ltd.
System	Band 25 Duplexer	Date	Apr.19, 2016
Part Number	D6HQ1G962DP39	Version 7.0deB	Final

			Condition	Sp	pecificatio	on		
	ltem		(MHz)	Min	Тур	Max	Unit	Remarks
Tx	Insertion	loss	1850 ~ 1915	-	2.4	3.8		
to			1850.48 ~ 1909.52	-	1.9	2.7	dB <mark>(*1)</mark>	(*2)
ANT	NT		1850.625 ~ 1909.375	-	2.0	3.0		(*3)
	Ripple (a	ny 5MHz)	1850~1915	-	0.5	2.4	dB	
	VSWR	ANT		-	1.6	2.1	-	
		Тx	1850~1915	-	1.8	2.2	-	
	Input Pov	wer	1850~1915	29dB	8m, Ta=+ 5kh, CW	.50°C	dBm	
	Absolute		1559 ~ 1563	31	34	-	dB	
	attenuati	on	1565.4 ~ 1573.4	31	34	-	dB	
			1573.4~1577.5	31	34	-	dB	
			1577.5~1585.4	31	34	-	dB	
			1597.6~1605.9	31	34	-	dB	
			1000 1005	35	50	-	dB	-10~+25 ∘C
			1930 ~ 1995	45	50	-	dB	+25~+85 °C
			2400 ~ 2500	22	36	-	dB	
			3700 ~ 3830	28	38	-	dB	
			5550 ~ 5745	20	30	-	dB	
ANT	Insertion	loss			0.7	3.8		-10 ~ +25 °C
to			1930.48~1994.52	-	2.1	3.6	an (1)	+25 ~ +85 °C
Rx	Ripple (a	ny 5MHz)	1930.48~1994.52	-	0.8	2.5	dB	
	VSWR	Ant	1020 49-1004 52	-	1.7	2.2	-	
		Rx	1930.46~1994.52	-	1.8	2.3	-	
	Absolute		1850 ~ 1915	40	57	-	dB	
	attenuati	on	2400 ~ 2500	40	49	-	dB	
			3860 ~ 3990	40	63	-	dB	
			5790 ~ 5985	40	65	-	dB	

Table 1-1. Electrical Specification

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

(*2) The integrated isolation over channel band width (+/- 1.92MHz)

(*3) The integrated isolation over channel band width (+/- 0.625MHz)





'b-free Pb Free Part

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Table 1-2. Electrical Specification

Item		Condition	Specification				
		(MHz)	Min	Тур	Max	Unit	Remarks
Tx	Isolation		53	57	-	dB	-10 ~ +60 °C
to		1850.25~1914.75	50	57	-	dB	+60 ~ +85 °C
Rx			45	52	-	dB	(*3) -10 ~ +25 °C
		1930.25~1994.75	48	52	-	dB	(*3) +25 ~ +85 °C
Terminating Impedance		Tx port	50		Ω	Single-ended	
		Rx port	50		Ω	Single-ended	
		Ant port	50 // 3.9 nH		Ω	Single-ended	
Operating Temperature		-10 to +85			۰C		
Device s	ize (Lmax. x Wmax. x	Hmax.)	1.8	x 1.4 x 0.	.57	mm	

(*3) The integrated isolation over channel band width (+/- 0.625MHz)





PD-free Pb Free Part

Customer Name	Standard	TAIYO YUDEN Mob	ile Technology Co.,Ltd.
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Dimensions



Unit: mm

Pin Configuration

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

Figure 1. Dimensions and Pin assignment





Pb Free Part

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Evaluation Circuit



Recommended foot print pattern



Figure 2. Recommended foot print pattern





Pb Free Part

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Tx to Ant





These data **exclude** loss that comes from the test board.





Pb-free Pb Free Part

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Tx to Ant, Ant to Rx



Tx to Rx Isolation





These data **exclude** loss that comes from the test board.





Pb-free Pb Free Part

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Tx Port





Figure 3-3. Electrical Characteristics





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Rx Port



Figure 3-4. Electrical Characteristics





Pb-free Part

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Ant Port



Figure 3-5. Electrical Characteristics





Ph Free Part

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Tx to Ant (Wide span)



Ant to Rx (Wide span)







Pb Free Part

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Ordering Code

Ordering Code	Packing	Reel size	Status
D6HQ1G962DP39-Z	Tape & Reel	3,000 pcs.	MP
D6HQ1G962DP39-ZA	Tape & Reel	less than 3,000 pcs.	MP
D6HQ1G962DP39-Y	Tape & Reel	15,000 pcs.	MP
D6HQ1G962DP39-YA	Tape & Reel	less than 15,000 pcs.	MP
D6HQ1G962DP39-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.