



* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co.,Ltd.	
System	Band VIII Duplexer	Date	March. 14, 2013
Part Number	D5PE942M5P3GT	Version 4.2cc	Final

Table 1. Electrical Specification

Item			Condition (MHz)	Specification			Unit	Remarks
				Min	Typ	Max		
Tx to ANT	Insertion loss		882.4~912.6	-	1.8	2.6 (*2)	dB (*1)	
	Ripple		882.4~912.6	-	0.8	1.9	dB	
	VSWR	Tx	880.4~914.6	-	1.9	2.2	-	
		Ant		-	1.7	2.0	-	
	Input Power		880.4~914.6	29dBm, Ta=+50°C 10000h, WCDMA modulation			-	
	Absolute attenuation		10~821	33	38	-	dB	
			927.4~957.6	44(*2)	53	-	dB	
			1565.4~1605.9	45	50	-	dB	
			1760~1880	40	49	-	dB	
			1880~2500	33	39	-	dB	
			2620~2745	30	36	-	dB	
			3520~3660	20	31	-	dB	
			4400~4575	15	24	-	dB	
			5150~5850	10	25	-	dB	
ANT to Rx	Insertion loss		927.4~957.6	-	2.2	2.6 (*2)	dB	
			925~960	-	2.3	3.3	(*1)	
	Ripple		925~960	-	0.8	2.2	dB	
	Amplitude balance		925~960	-0.7	-0.3/+0.2	+0.7	dB	
	Phase balance		925~960	-7	-2/+3	+7	deg	
	VSWR	Ant	925~960	-	1.8	2.1	-	
		Rx		-	2.0	2.3	-	
	Absolute attenuation		10~880	35	58	-	dB	
			882.4~912.6	48(*2)	58	-	dB	
			1045~4810	35	48	-	dB	
Tx to Rx	Isolation		882.4~912.6	56(*2)	60	-	dB	
			927.4~957.6	50(*2)	55	-	dB	
Terminating Impedance			Tx port	50			Ohm	Single-ended
			Rx port	100			Ohm	Differential
			Ant port	50 // 7.5nH			Ohm	Single-ended
Maximum DC Voltage			Tx,Rx port	+/- 5			V	
			ANT port	0			V	
Operating Temperature				-20 to +85			°C	
Device size (LxWxH)				2.0 x 1.6 x 0.5max.			mm	

(*1) Specification of insertion loss excludes loss that comes from the test board. (Approximately 0.05dB)

(*2) Integrated over +/-1.92MHz around the WCDMA channel center frequency

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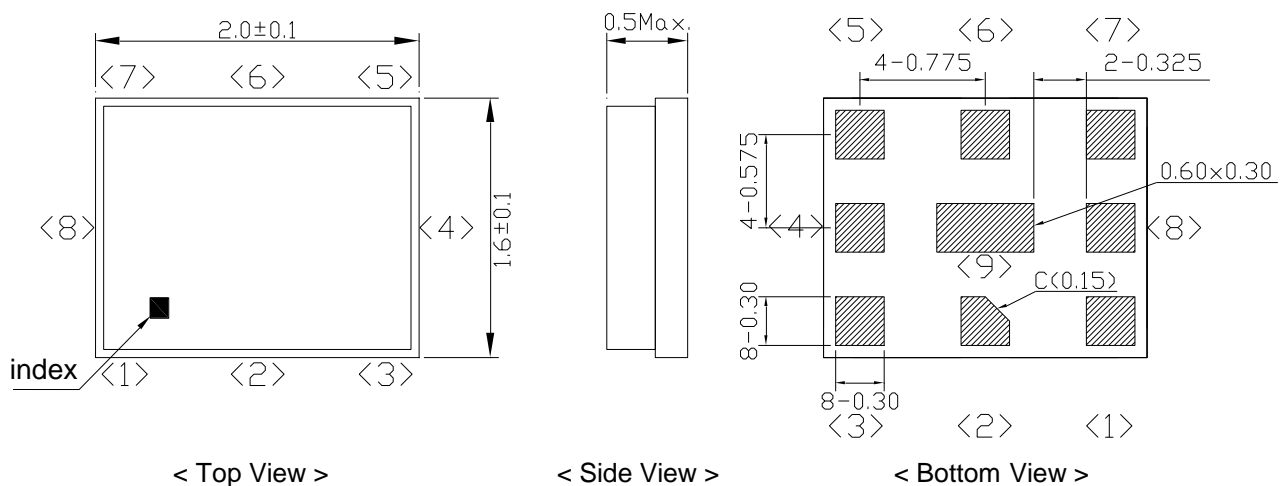
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Dimensions



Unit: mm

Pin Configuration

Pin No.	Pin name	Description
1	Rx	Receiver Pin (balanced)
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	Rx	Receiver Pin (balanced)
9	GND	Ground Pin

Figure 1. Dimensions and Pin assignment



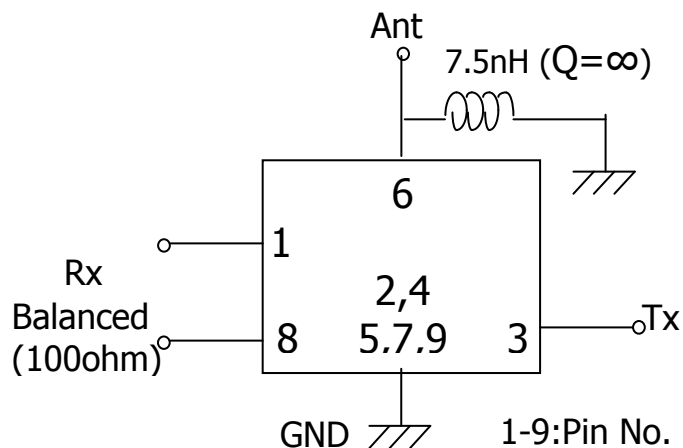
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Evaluation Circuit



Recommended foot print pattern

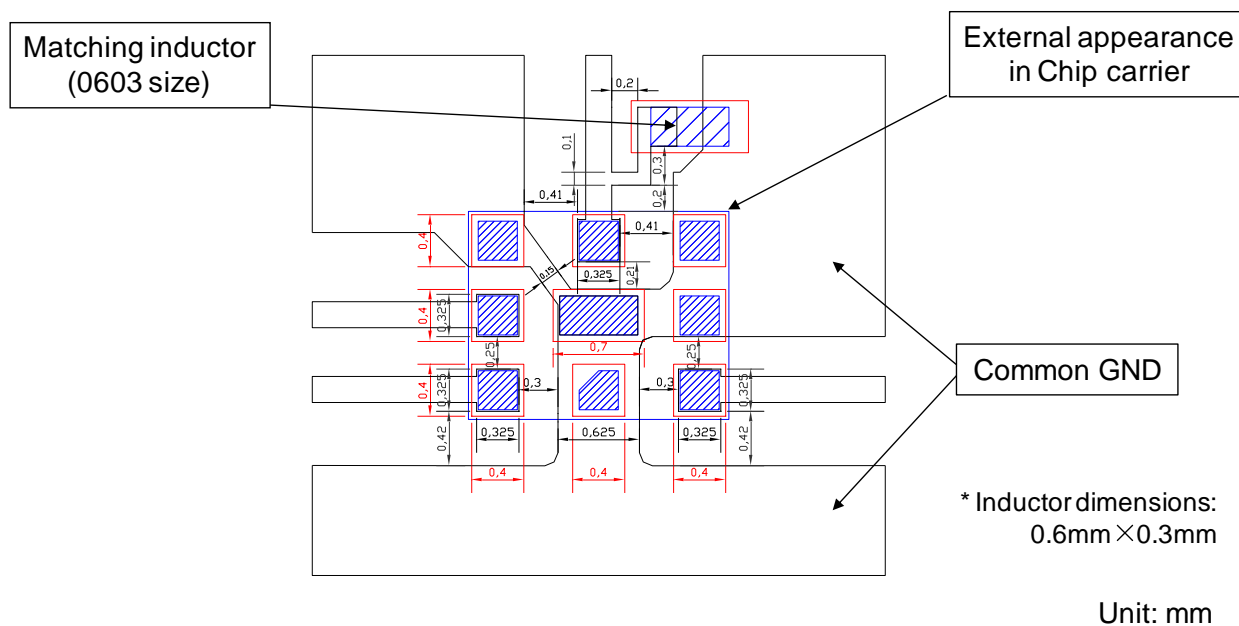


Figure 2. Recommended foot print pattern



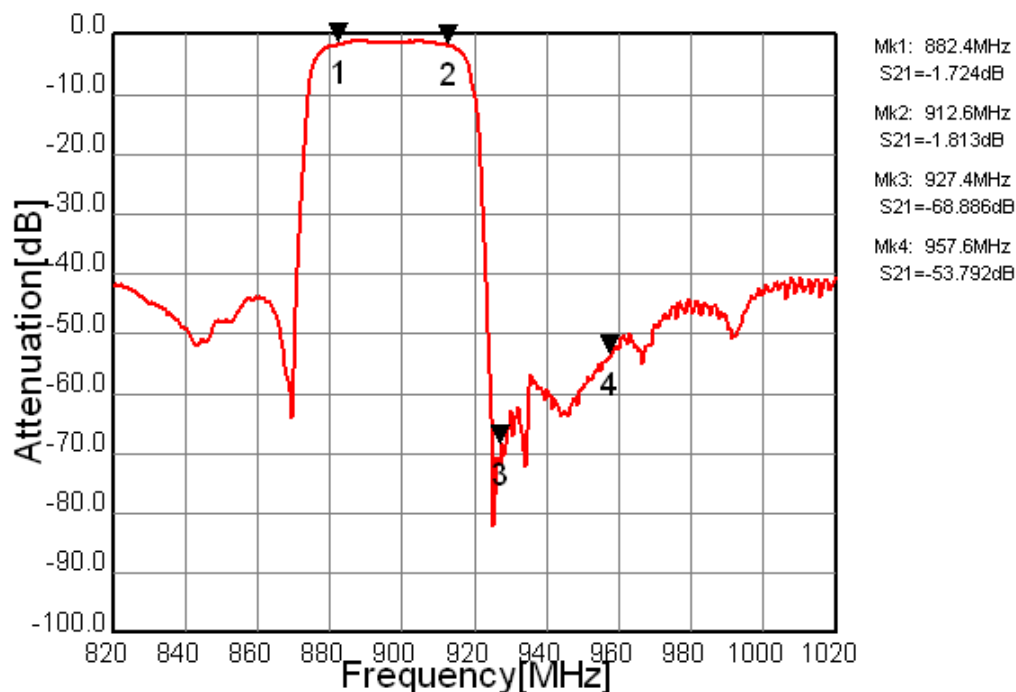
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Tx to Ant



Ant to Rx

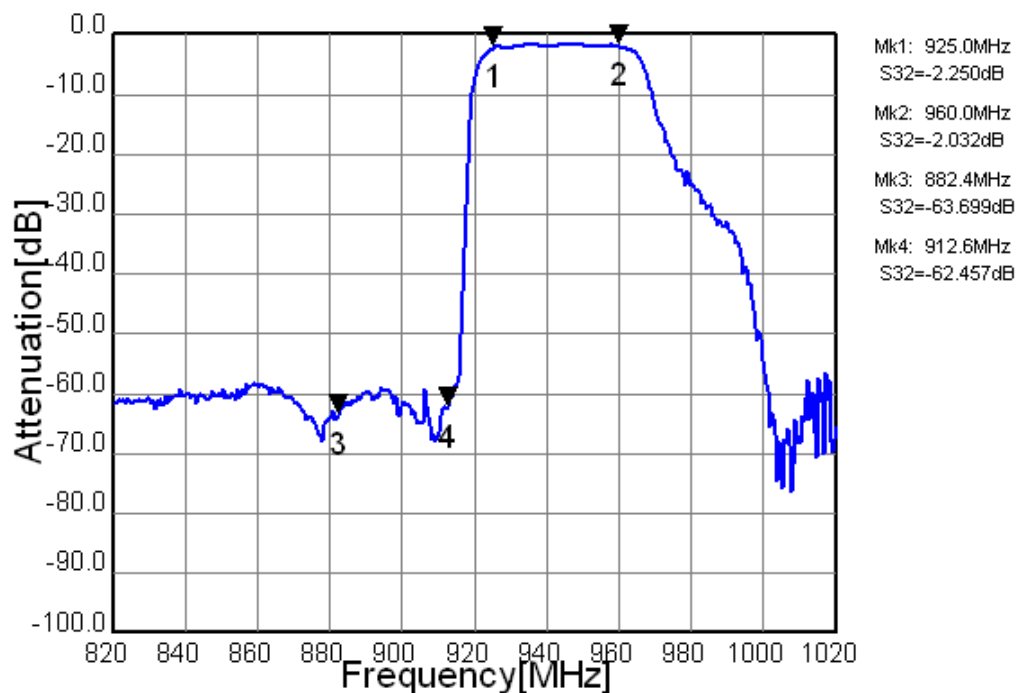


Figure 3-1. Electrical Characteristics

These data **include** loss that comes from the test board. (Approximately 0.05dB)

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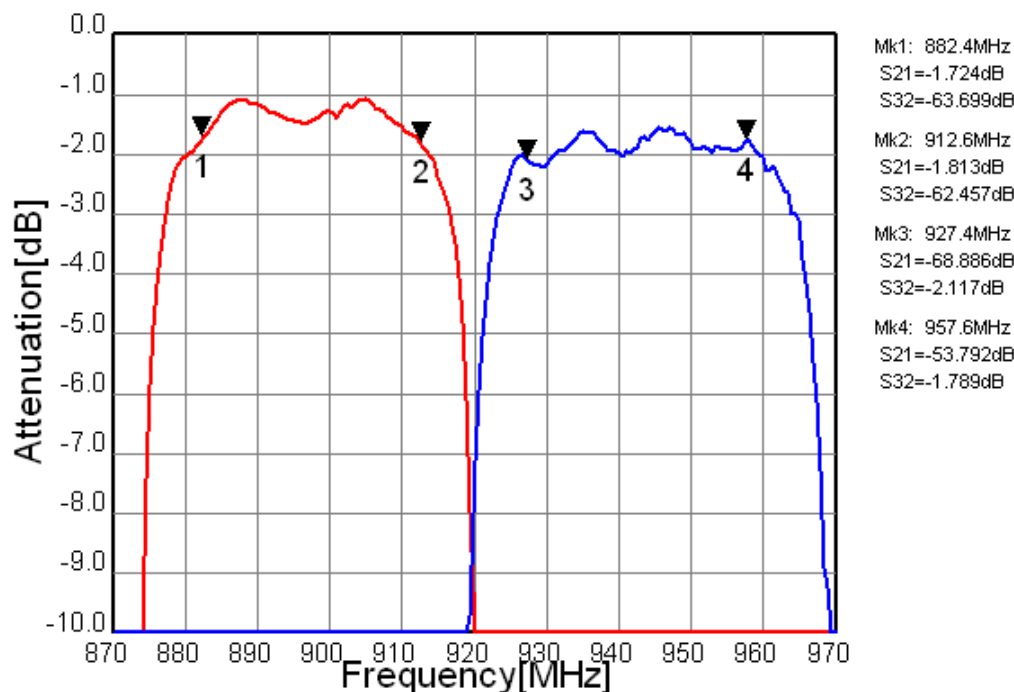
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Tx to Ant, Ant to Rx



Tx to Rx Isolation

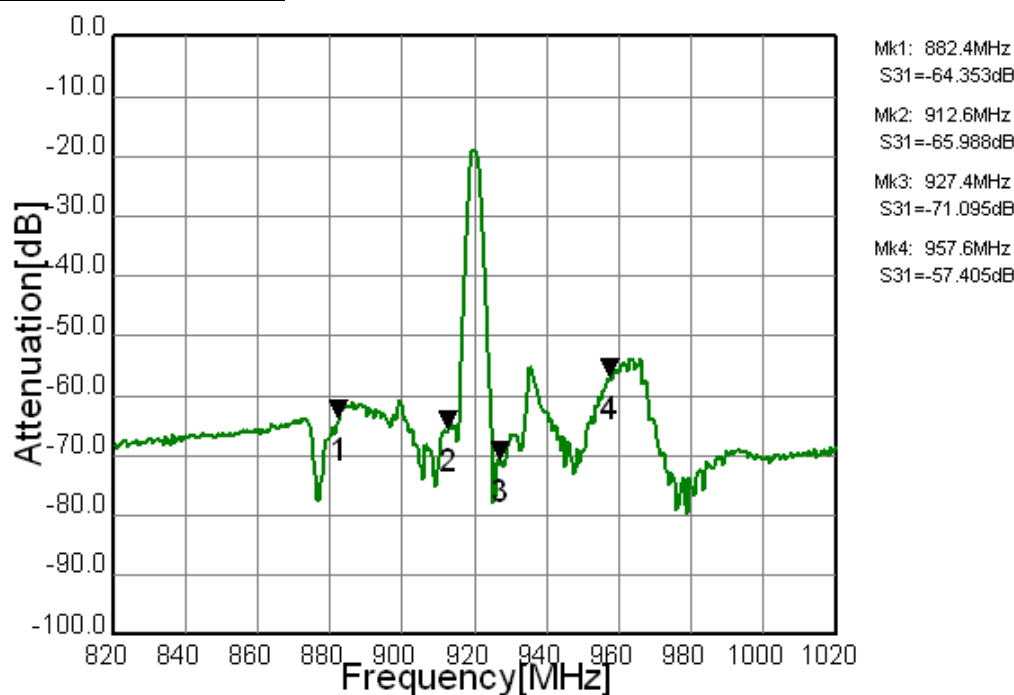


Figure 3-2. Electrical Characteristics

These data **include** loss that comes from the test board. (Approximately 0.05dB)

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Tx Port

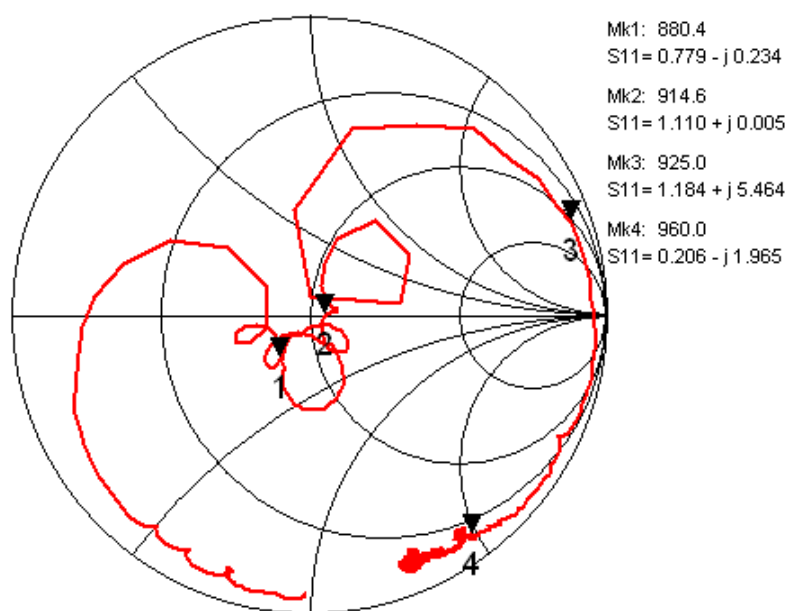
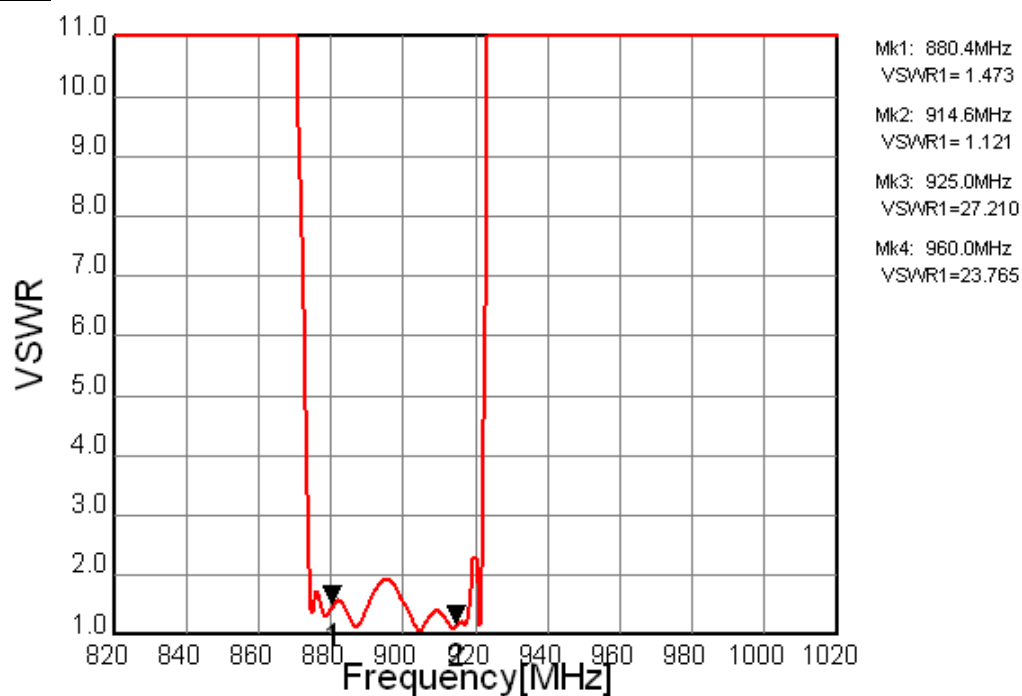


Figure 3-3. Electrical Characteristics



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Rx Port

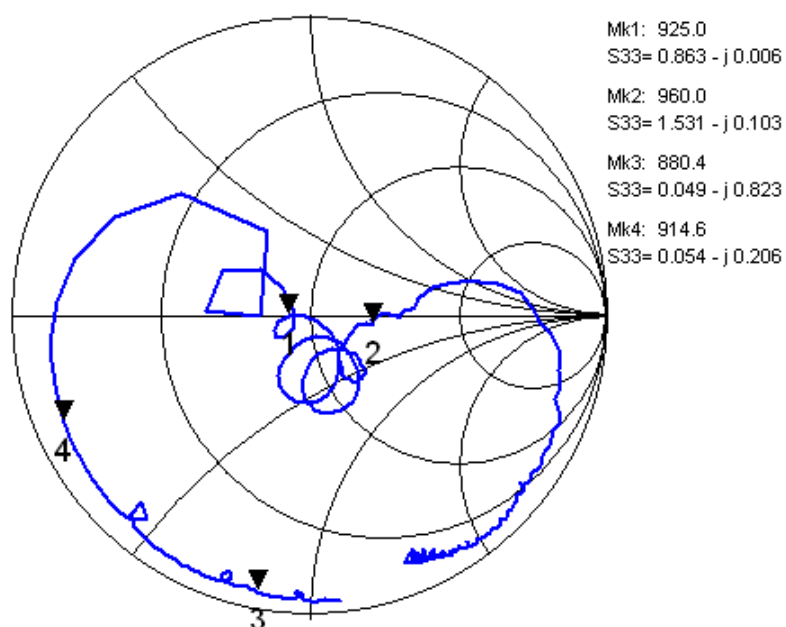
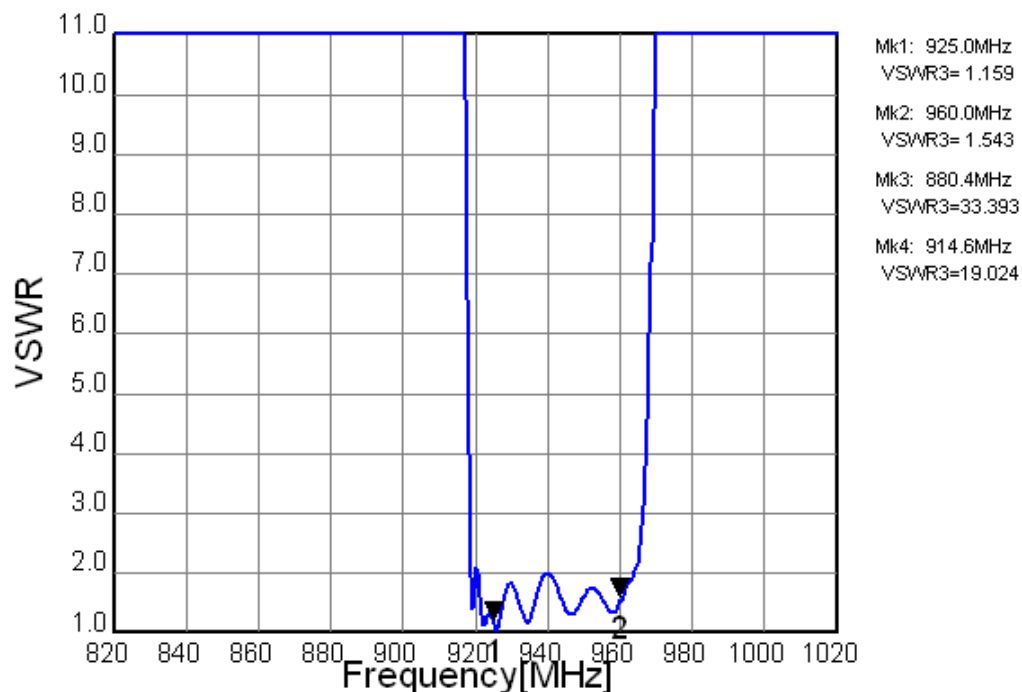


Figure 3-4. Electrical Characteristics



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Ant Port

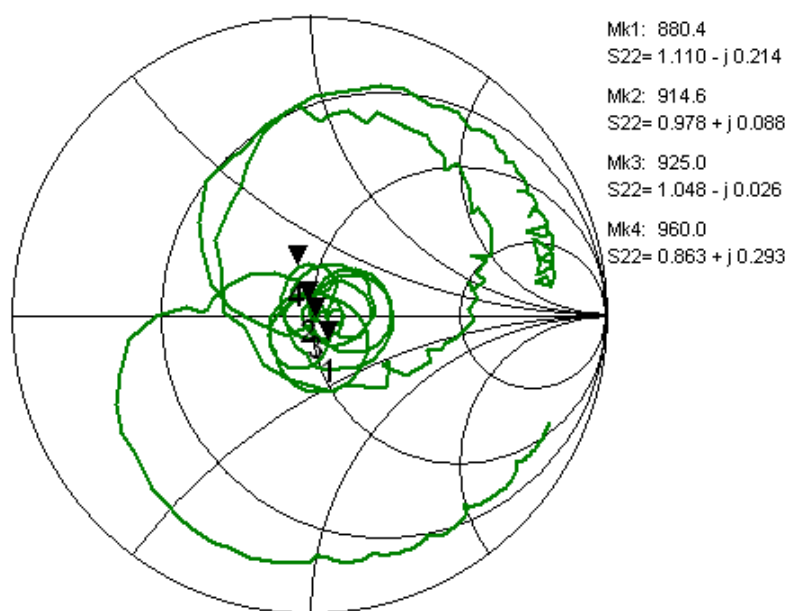
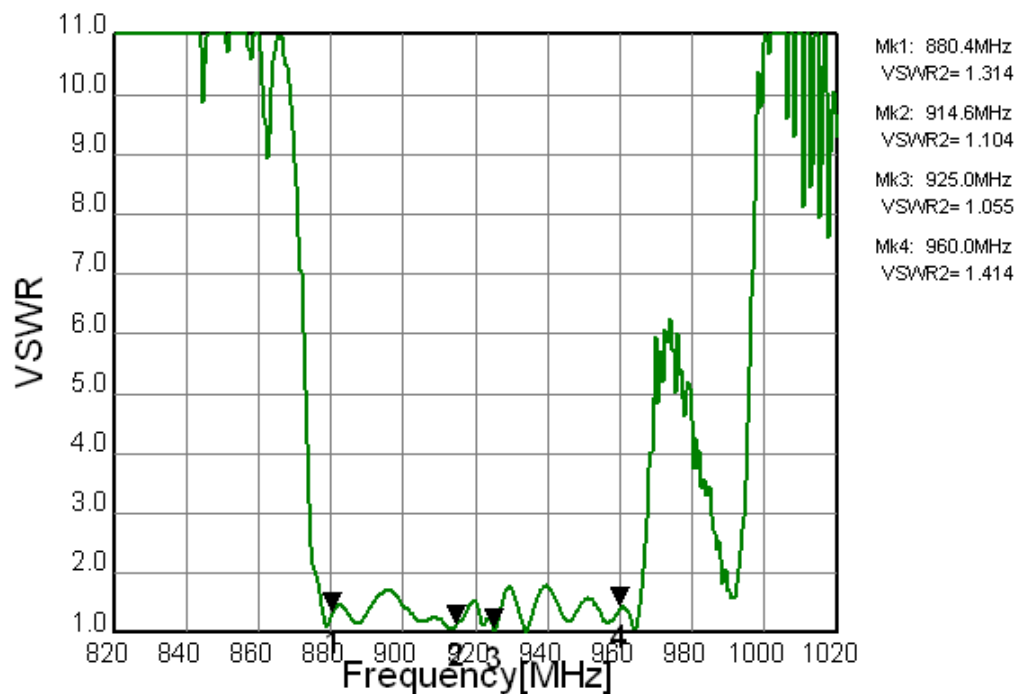


Figure 3-5. Electrical Characteristics



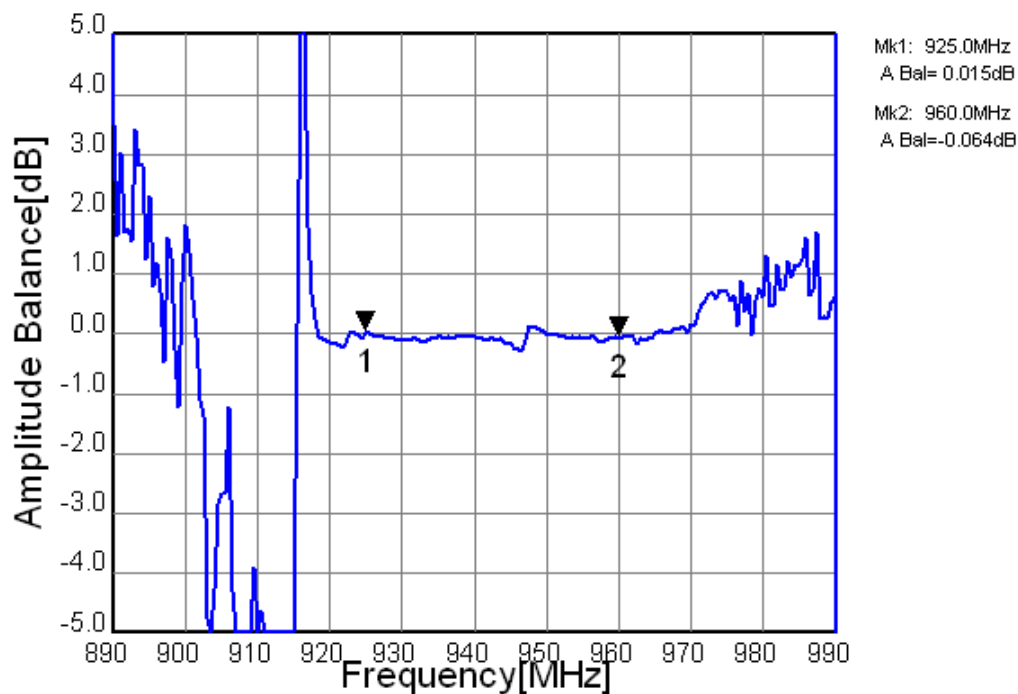
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Ant to Rx (Amplitude balance)



Ant to Rx (Phase balance)

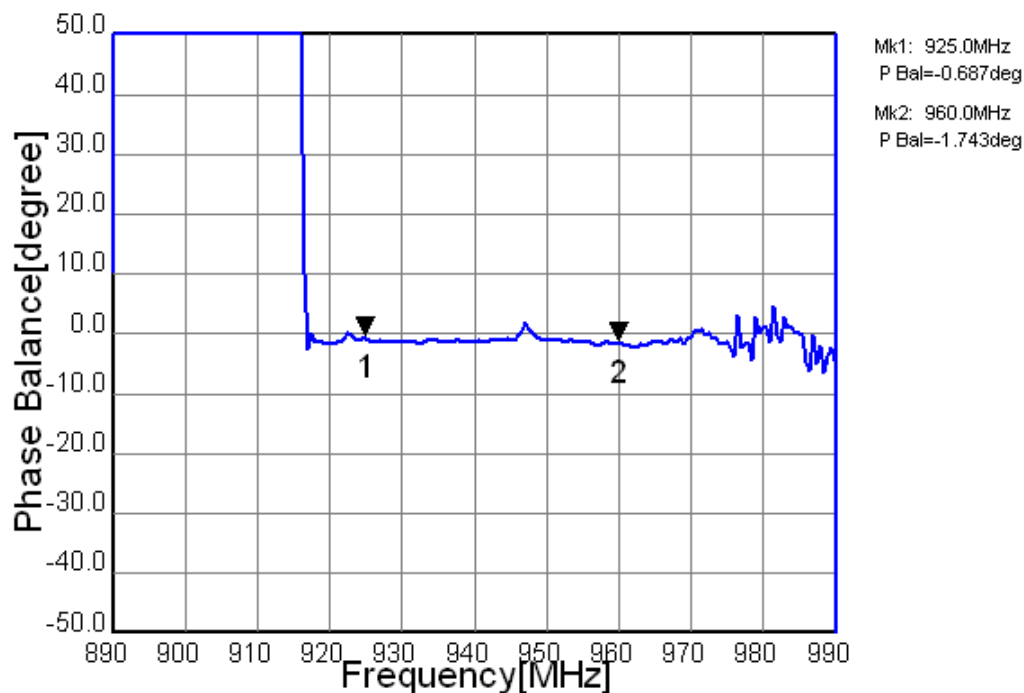


Figure 3-6. Electrical Characteristics

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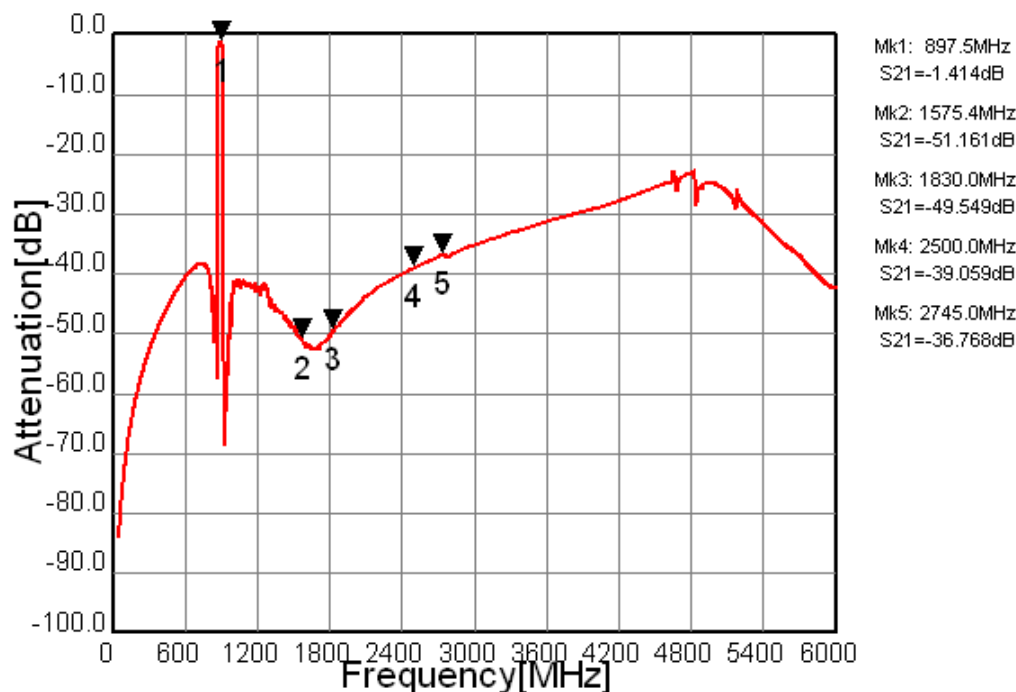
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Tx to Ant (Wide span)



Ant to Rx (Wide span)

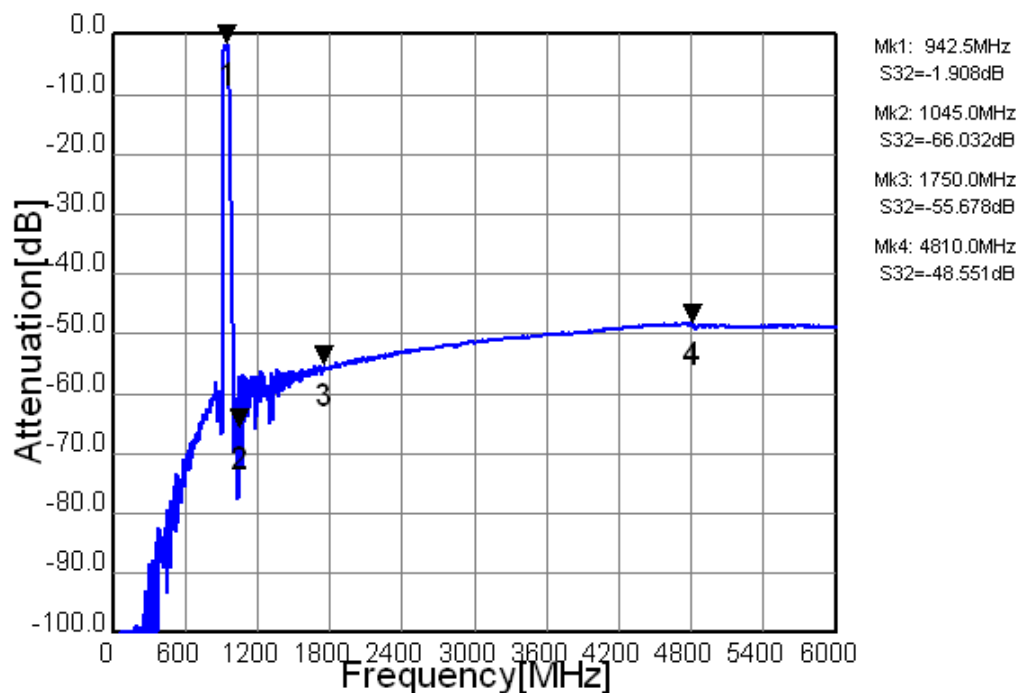


Figure 3-7. Electrical Characteristics



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Ordering Code

Ordering Code	Packing	Reel size	Status
D5PE942M5P3GT- Z	Tape & Reel	3,000 pcs.	MP
D5PE942M5P3GT- ZA	Tape & Reel	less than 3,000 pcs.	MP
D5PE942M5P3GT- Y	Tape & Reel	15,000 pcs.	MP
D5PE942M5P3GT- YA	Tape & Reel	less than 15,000 pcs.	MP
D5PE942M5P3GT- 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.

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