



\* Pb Free Part



MSL1

Customer Name	Standard	TAIYO YUDEN Mobile Technology Co., Ltd.	
System	Band I Duplexer	Date	March 31, 2010
Part Number	FAR-D6JH-2G1400-B1BT	Version 1.0gf	

**Table 1. Electrical Specification**

Item			Condition (MHz)	Specification			Unit	Remarks
				Min	Typ	Max		
Tx to ANT	Insertion loss		1920~1980	-	1.4	1.65	dB (*1)	
	Ripple		1920~1980	-	0.5	1.0	dB	
	VSWR	ANT	1920~1980	-	1.7	2.0	-	
		Tx		-	1.5	2.0	-	
	Absolute attenuation		1574~1577	30	32	-	dB	
			2110~2170	42	45	-	dB	
			3840~3960	15	19	-	dB	
Input Power		1920~1980	+29dBm, Ta=+50°C, 50k h			dBm		
ANT to Rx	Insertion loss		2110~2170	-	1.7	2.0	dB (*1)	
	Ripple		2110~2170	-	0.5	1.0	dB	
	Phase balance		2110~2170	-6	-3/+14	+18	deg	
	Amplitude balance		2110~2170	-1.2	-0.8 /+0.8	+1.2	dB	
	VSWR	ANT	2110~2170	-	1.4	2.0	-	
		Rx		-	1.6	2.0	-	
	Absolute attenuation		1920~1980	48	50	-	dB	
Tx to Rx	Isolation		1920~1980	54	58	-	dB	
			2110~2170	46	48	-	dB	
Terminating Impedance			Tx port	50			Ohm	Single-ended
			Rx port	100 // 15nH			Ohm	Balanced
			Ant port	50 // 3.0nH			Ohm	Single-ended
Operating Temperature				-20 to +85			°C	
Device size (L typ. x W typ. x H max.)				2.5 x 2.0 x 0.65			mm	

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



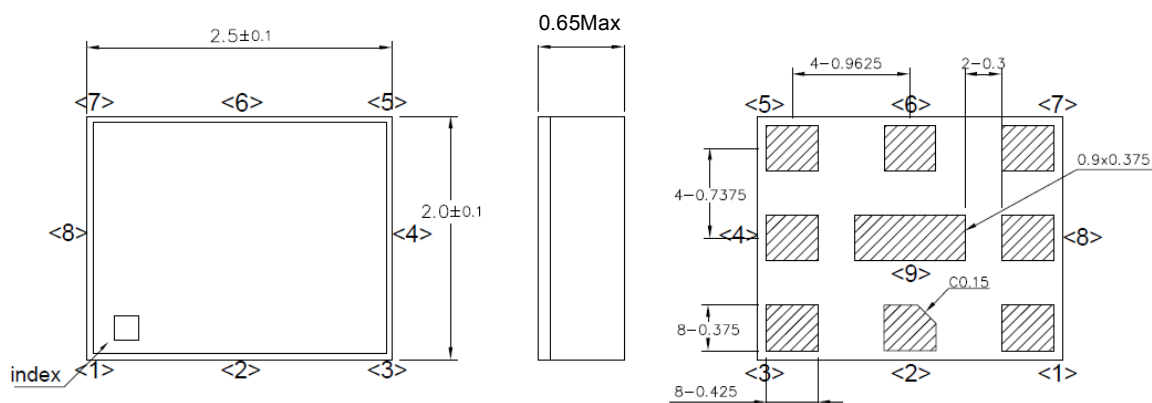
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## Dimensions



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**



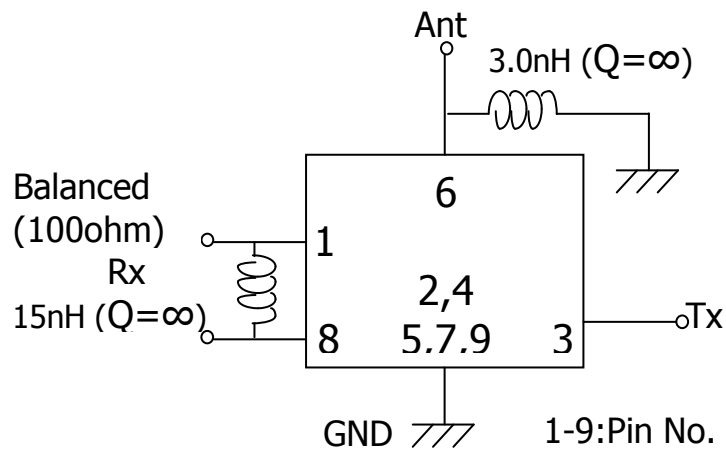
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## Evaluation Circuit



## Recommended foot print pattern

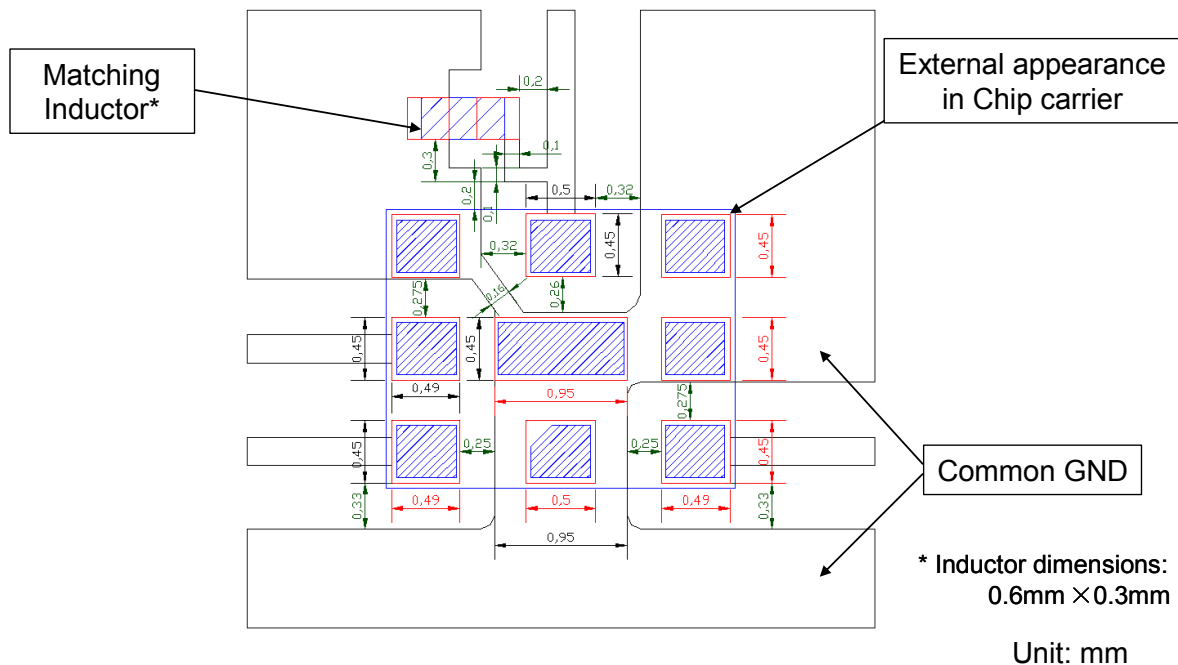


Figure 2. Recommended foot print pattern



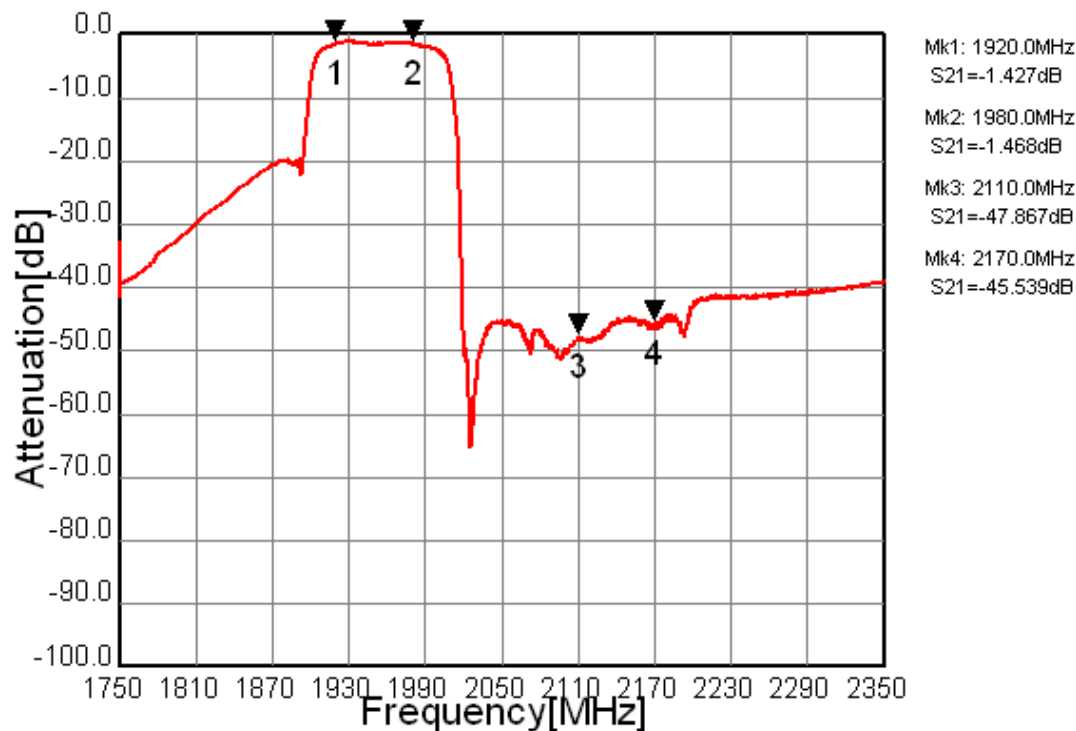
Pb-free  
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## Tx to Ant



## Ant to Rx



**Figure 3-1. Electrical Characteristics**

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

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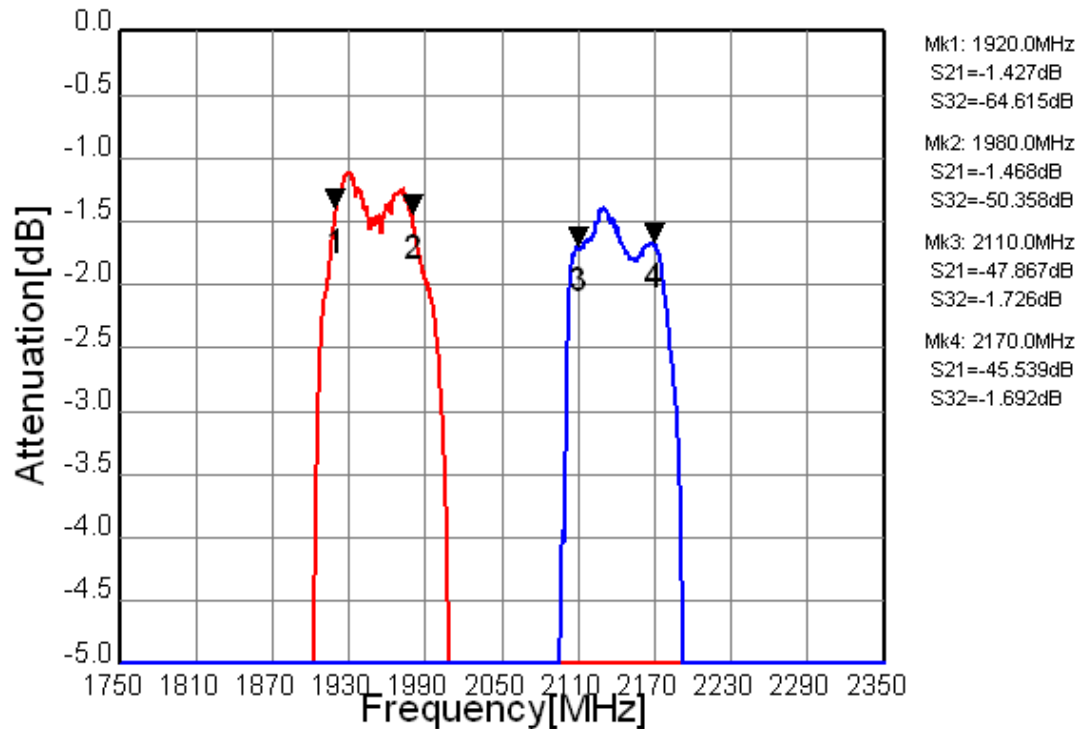
\* Pb Free Part



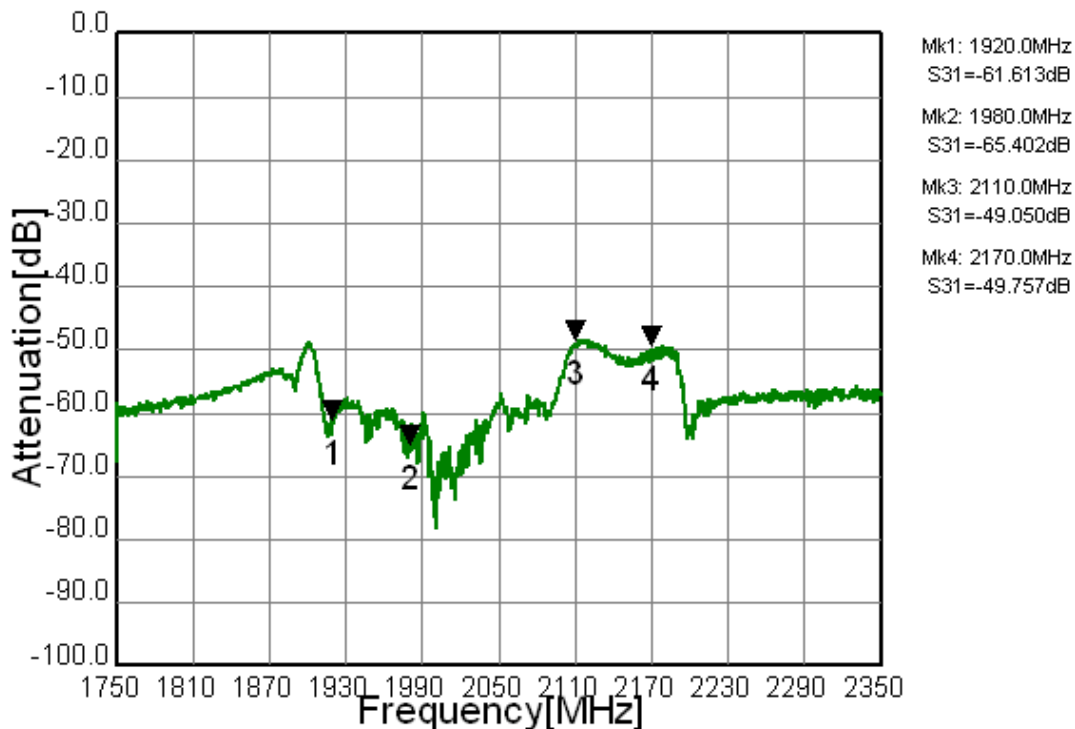
MSL1

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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 0.15dB. )

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## Tx Port

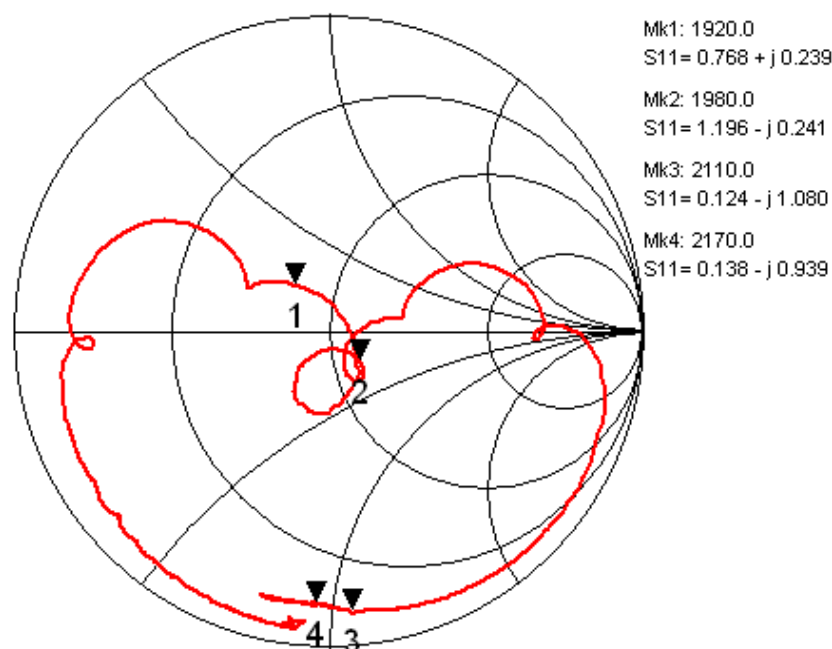
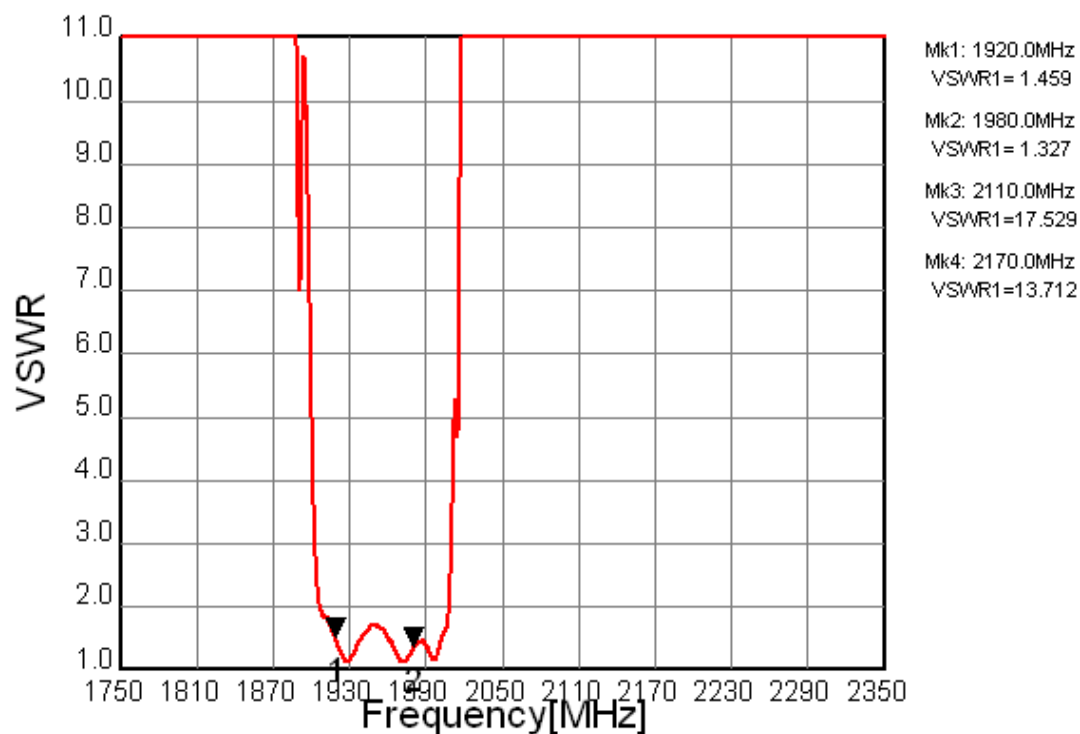


Figure 3-3. Electrical Characteristics

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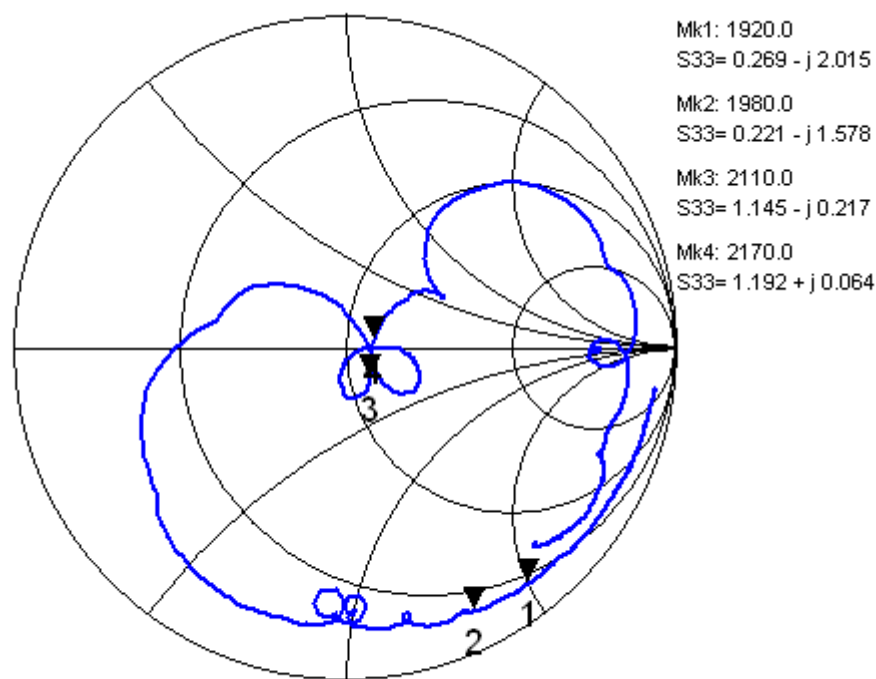
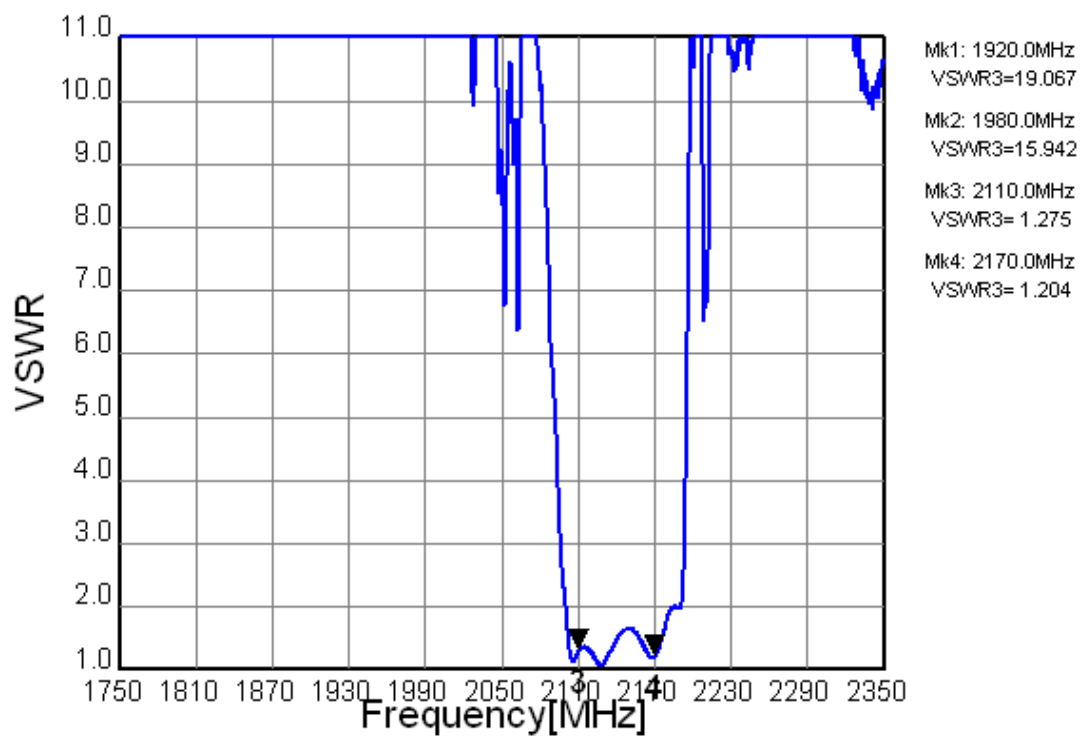
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## Rx Port



**Figure 3-4. Electrical Characteristics**



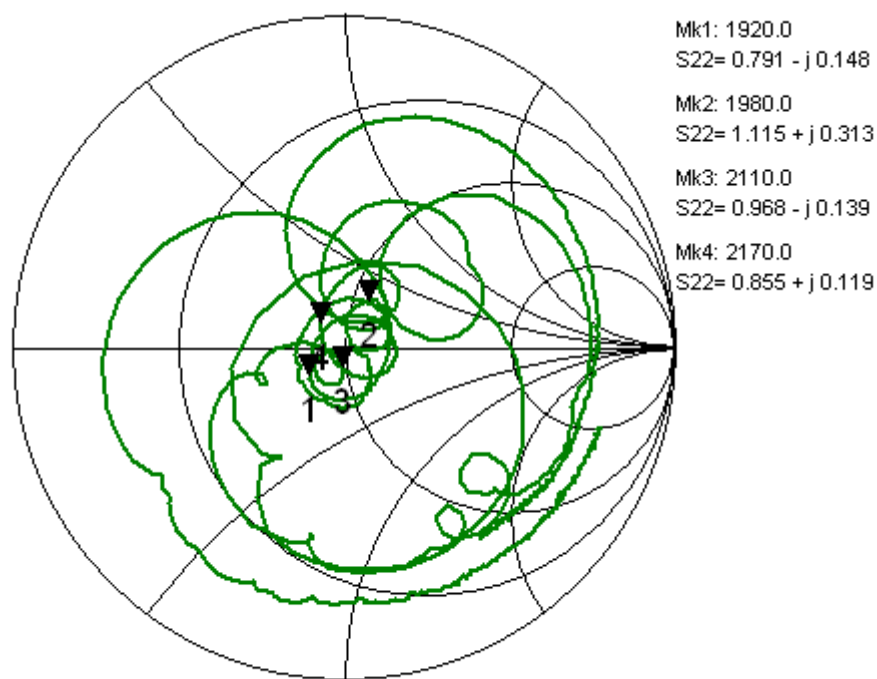
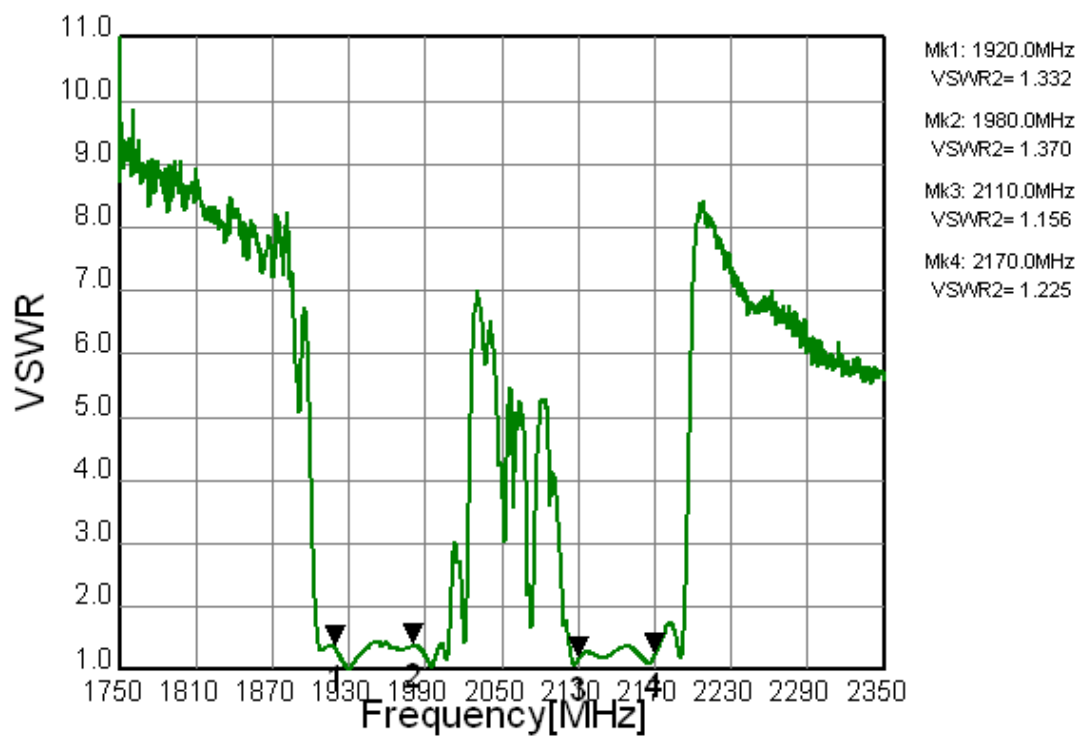
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## Ant Port



**Figure 3-5. Electrical Characteristics**





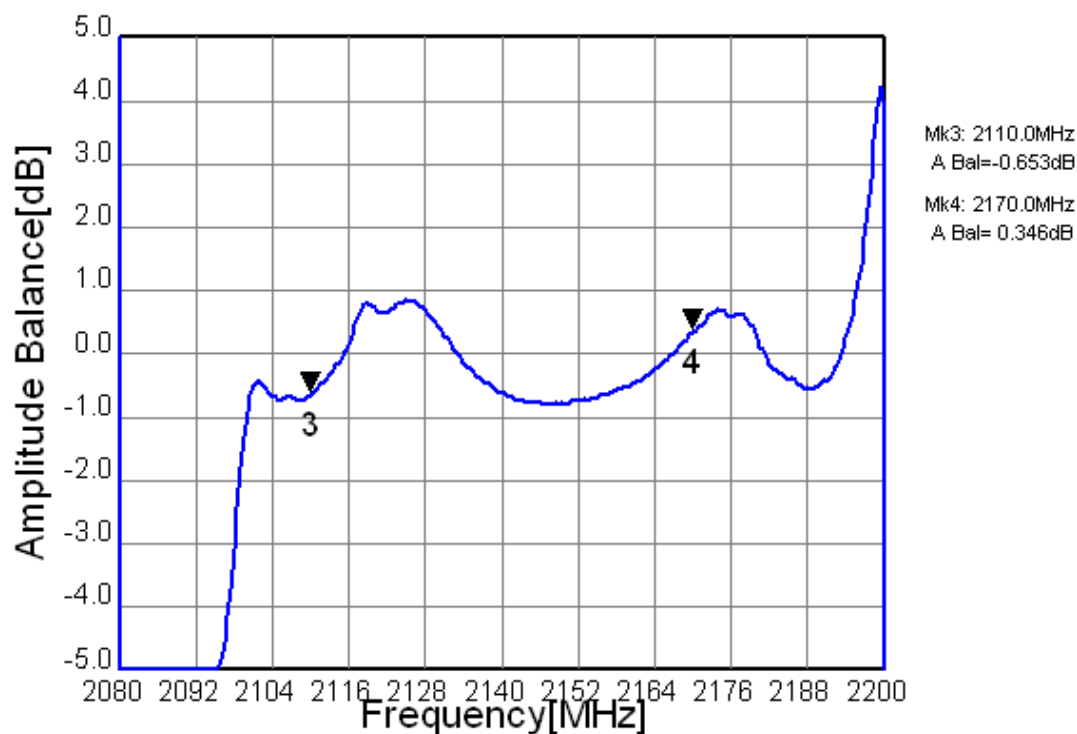
\* Pb Free Part



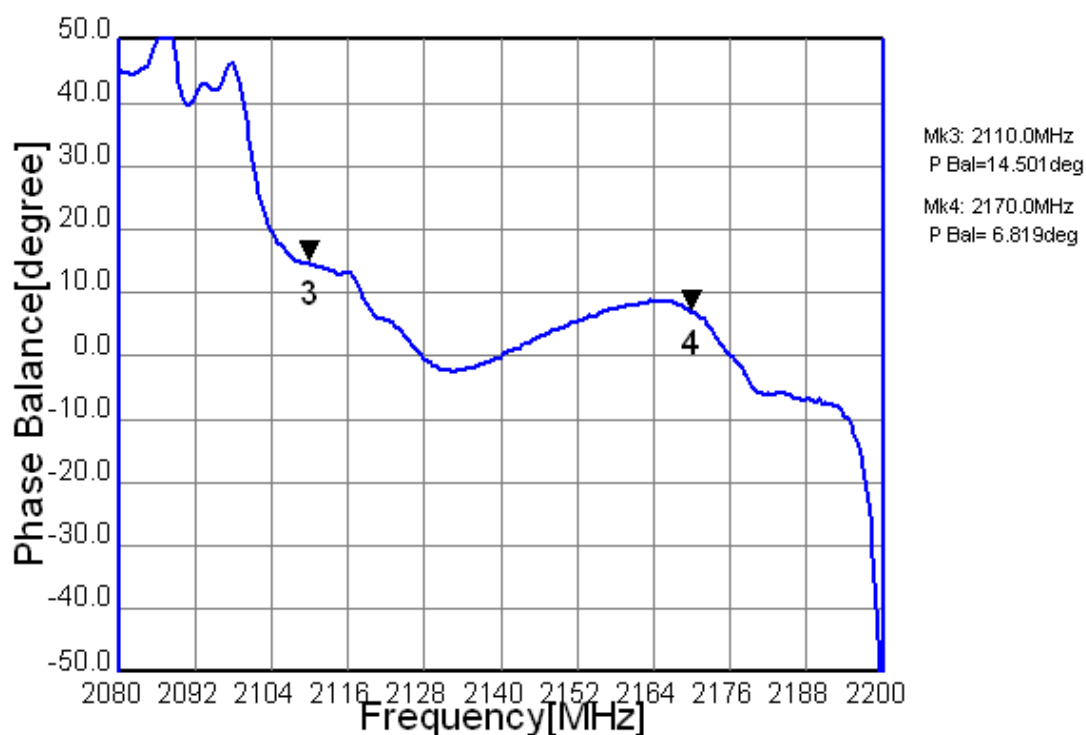
MSL1

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## Ant to Rx (Amplitude balance)



## Ant to Rx (Phase balance)



**Figure 3-6. Electrical Characteristics**



\* Pb Free Part



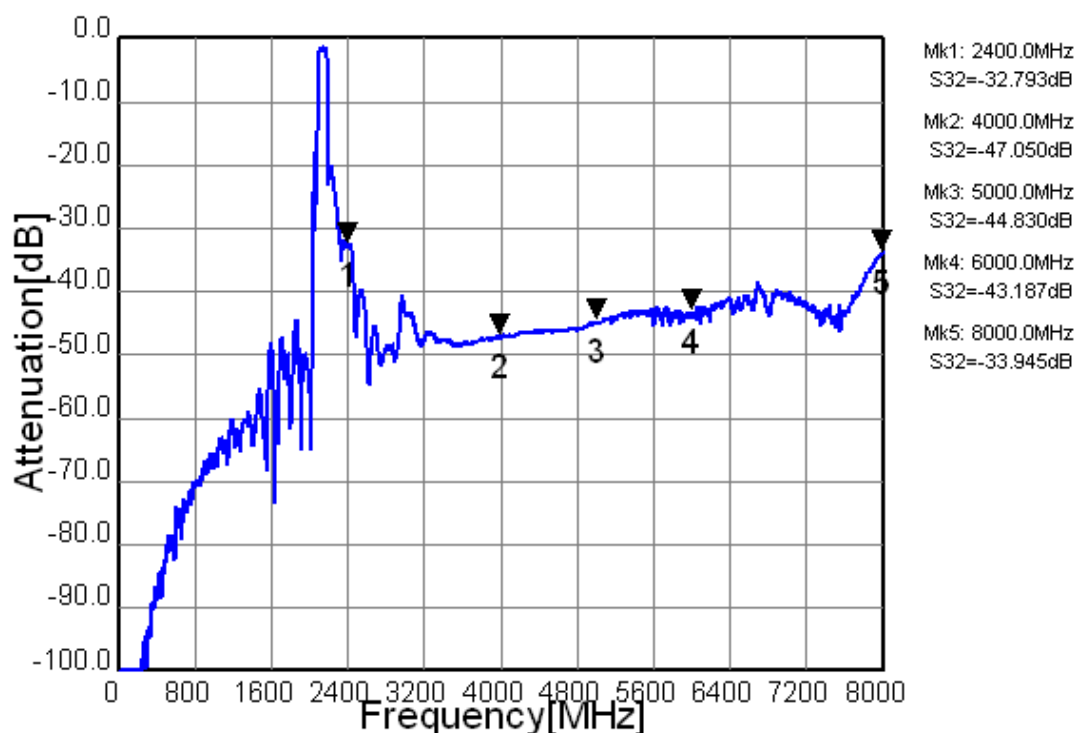
MSL1

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## Tx to Ant (Wide span)



## Ant to Rx (Wide span)



**Figure 3-7. Electrical Characteristics**

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