

# Technical proposal for JX-CD-2332-01WP Cavity Duplexer

## Revision History

Version	Date	Author	Revision description	Comment
V1.0	2017/04/06	Lee	Created	/

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1. Mechanical layout

Table 1 Mechanical Specifications

Dimension	LxWxH: 135.8mm x 96.2mm x 39.5 mm
Connectors	N-Female 4 hole panel receptacle plug
Ingress Protection	IP65
Finish	White fine grained (AkzoNobel:AD1300-9124037)
Notes	Material shall be RoHS 6/6

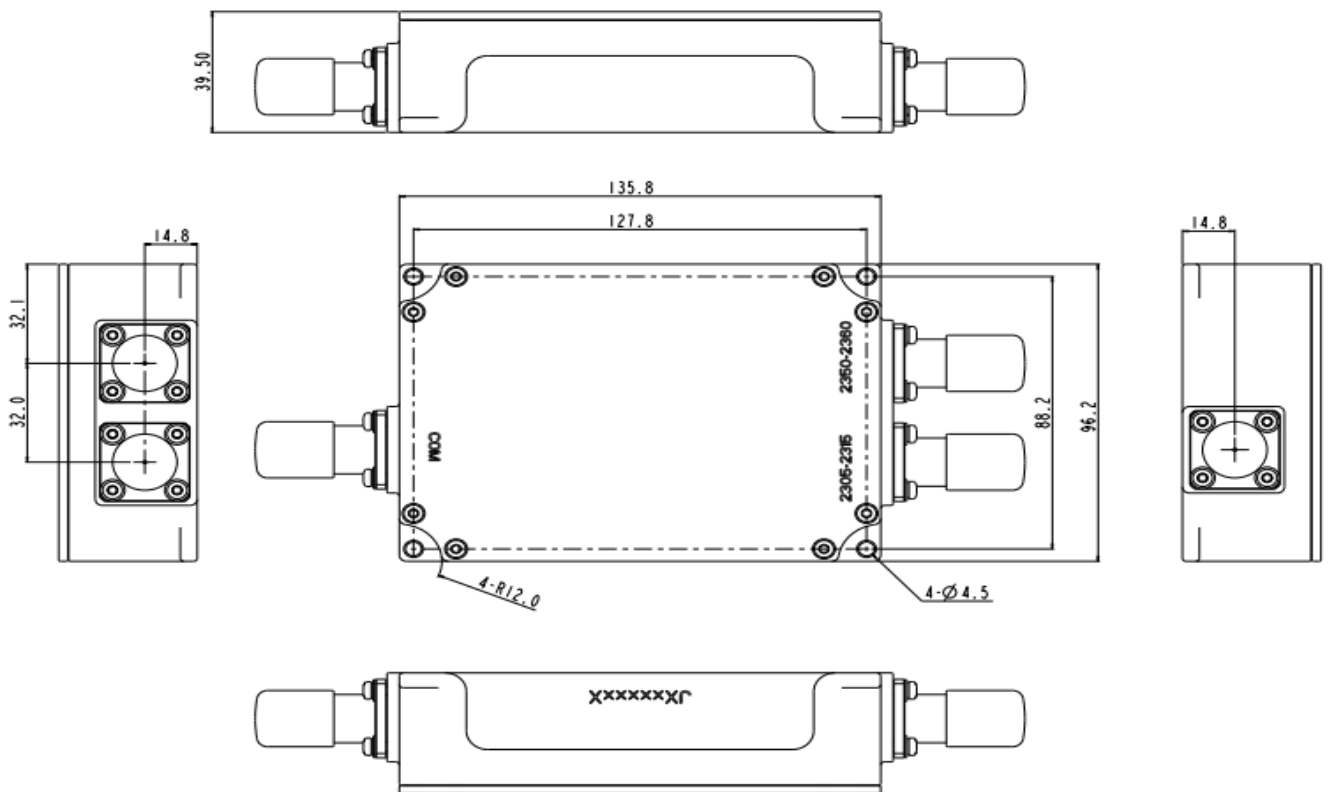


Figure 1 JX-CD-2332-01WP front panel layout

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## 2. Electrical analysis

### 2.1 Schematic diagram of the Duplexer

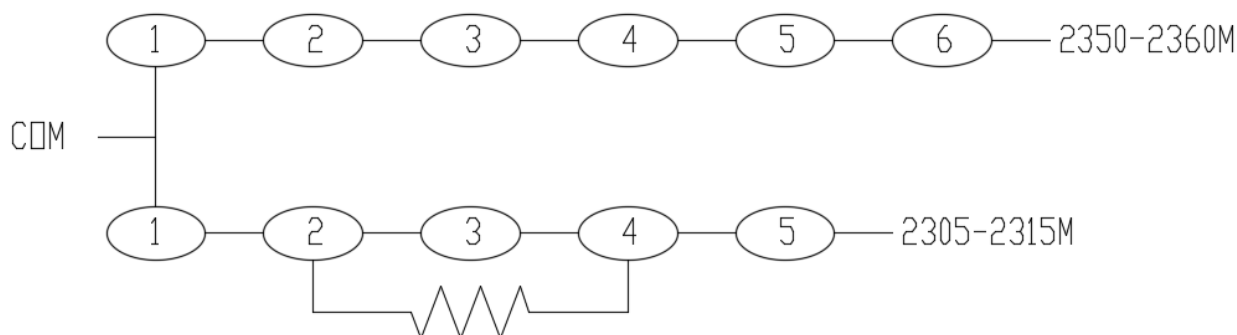


Figure 2 Topology of the Duplexer

### 2.2 Insertion loss budget

Table 2 Insertion loss budget @ 2305-2315M/2350-2360M path

No.	Parameter Name	Insertion Loss @ 2305-2315M path		Insertion Loss @ 2350-2360M path	
		2305-2315MHz		2350-2360MHz	
1	TEMP	Normal	FULL	Normal	FULL
2	Simulate	1.75	/	1.75	/
3	Loss Variation by ambient temperature	/	/	/	/
4	Coupler+Lowpassfilter+connection link	0.05	/	0.05	/
5	Margin	0.1	/	0.1	/
6	Total	1.9	/	1.9	/
7	Spec	2.5	/	2.5	/

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### 2.3 Electrical specifications

Table 3 Electrical specifications @ 2305-2315M/2350-2360M path

Item	Parameter	LOW	HIGH
1	Frequency Rang	2305-2315MHz	2350-2360MHz
2	Return loss (Normal Temp)	≥18 dB	≥18 dB
	Return loss (Full Temp)	/	/
3	Max insertion loss (Normal Temp)	≤2.5 dB	≤2.5 dB
	Max insertion loss (Full Temp)	/	/
4	Ripple	≤1.5 dB	≤1.5 dB
5	Rejections(Full Temp)	≥70 dB@2350-2360MHz	≥70 dB@2305-2315MHz
6	Impedance all ports	50 Ohm	

### 2.4 The simulation curve

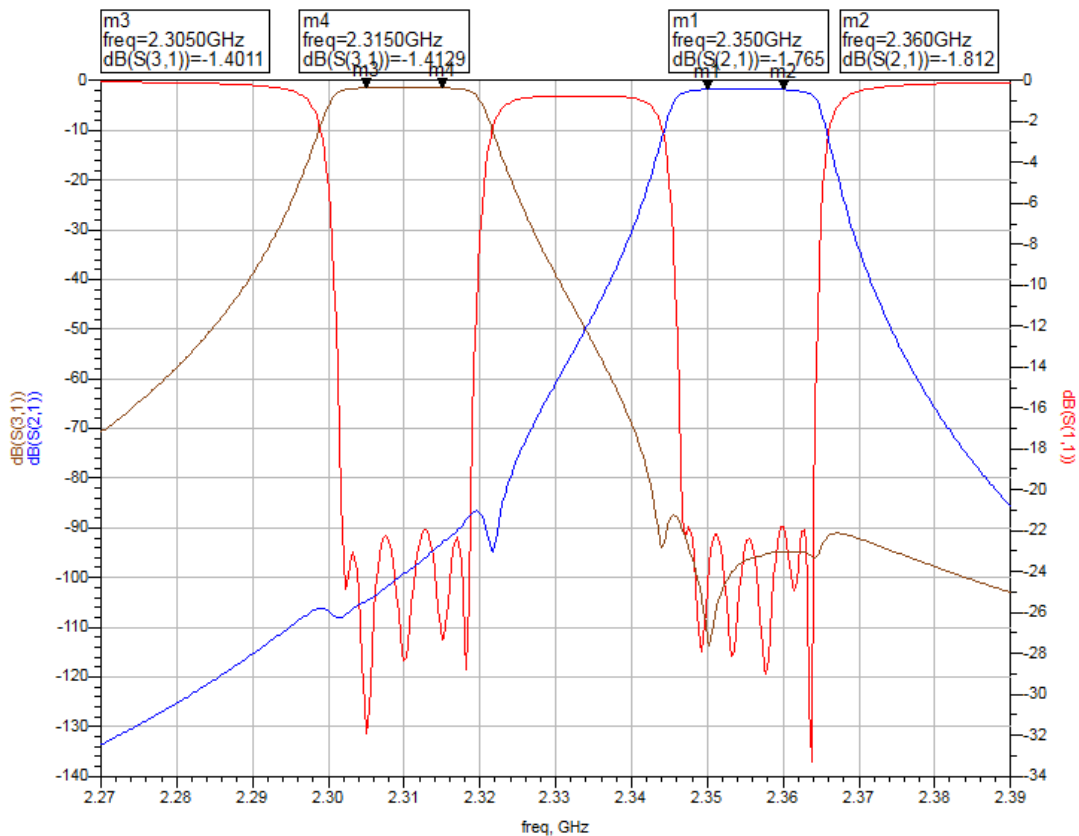


Figure 3 The simulation curve of the Duplexer

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