

Technical proposal for JX-CD2-415M430M-65D3 Cavity Duplexer

- ◆ Low PIM
- ◆ High Rejection
- ◆ High Reliability

Revision History

Version	Date	Author	Revision description	Comment
V1.0	2020/08/20	Lee	Created	/

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Table of content

Technical proposal for JX-CD2-415M430M-65D3 Cavity Duplexer.....	1
1. Mechanical layout.....	3
2. Electrical analysis.....	4
2.1 Electrical specifications	4
2.2 The simulation curve	4

Figures

Figure 1 JX-CD2-415M430M-65D3 front panel layout	3
Figure 2 The simulation curve RX	4
Figure 3 The simulation curve TX.....	5

Tables

Table 1 Mechanical specifications @ JX-CD2-415M430M-65D3	3
Table 2 Electrical specifications @ JX-CD2-415M430M-65D3	4

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1. Mechanical layout

Table 1 Mechanical specifications @ JX-CD2-415M430M-65D3

Dimension	LxWxH: 280mm x 155mm x 61mm (67mm Max)
Port connectors	DIN(7/16)-Female
Finish	Silver
Notes	Material shall be RoHS 6/6

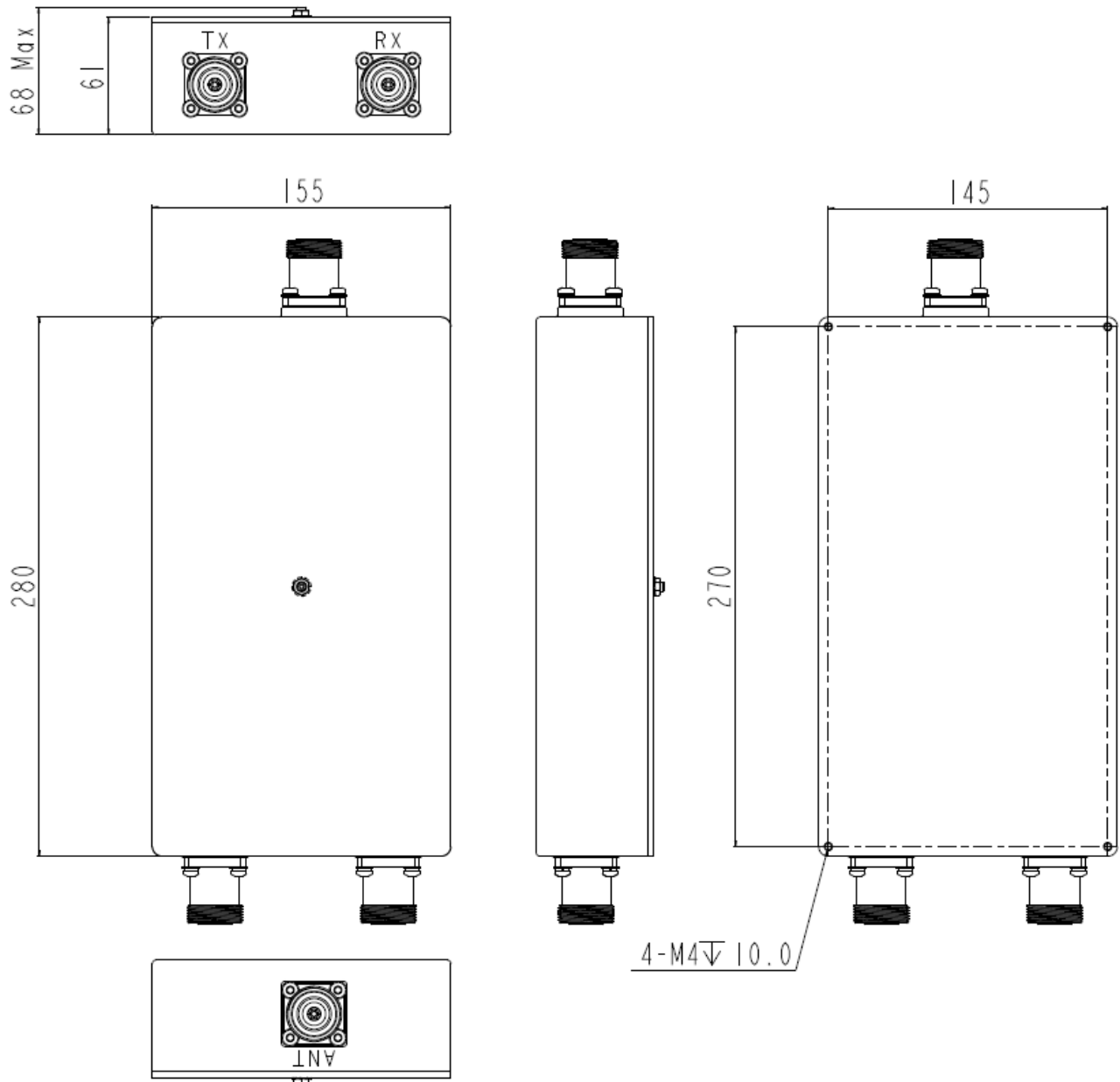


Figure 1 JX-CD2-415M430M-65D3 front panel layout

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2. Electrical analysis

2.1 Electrical specifications

Table 2 Electrical specifications @ JX-CD2-415M430M-65D3

Item	Parameter	RX	TX
1	Frequency range	415-420MHz	425-430MHz
2	Return loss	≥18dB	≥18dB
3	Insertion loss	≤1.7dB	≤1.7dB
4	Rejection	≥65dB@425-430MHz	≥65dB@415-420MHz
5	Isolation	≥65dB@415-420MHz & 425-430MHz	
6	PIM3	-155dBc@2*43dBm	
7	Input power	Average: 150W Max Peak: 1000W Max	
8	Operating temperature range	-10°C to +60°C	
9	Impedance	50 Ω	

2.2 The simulation curve

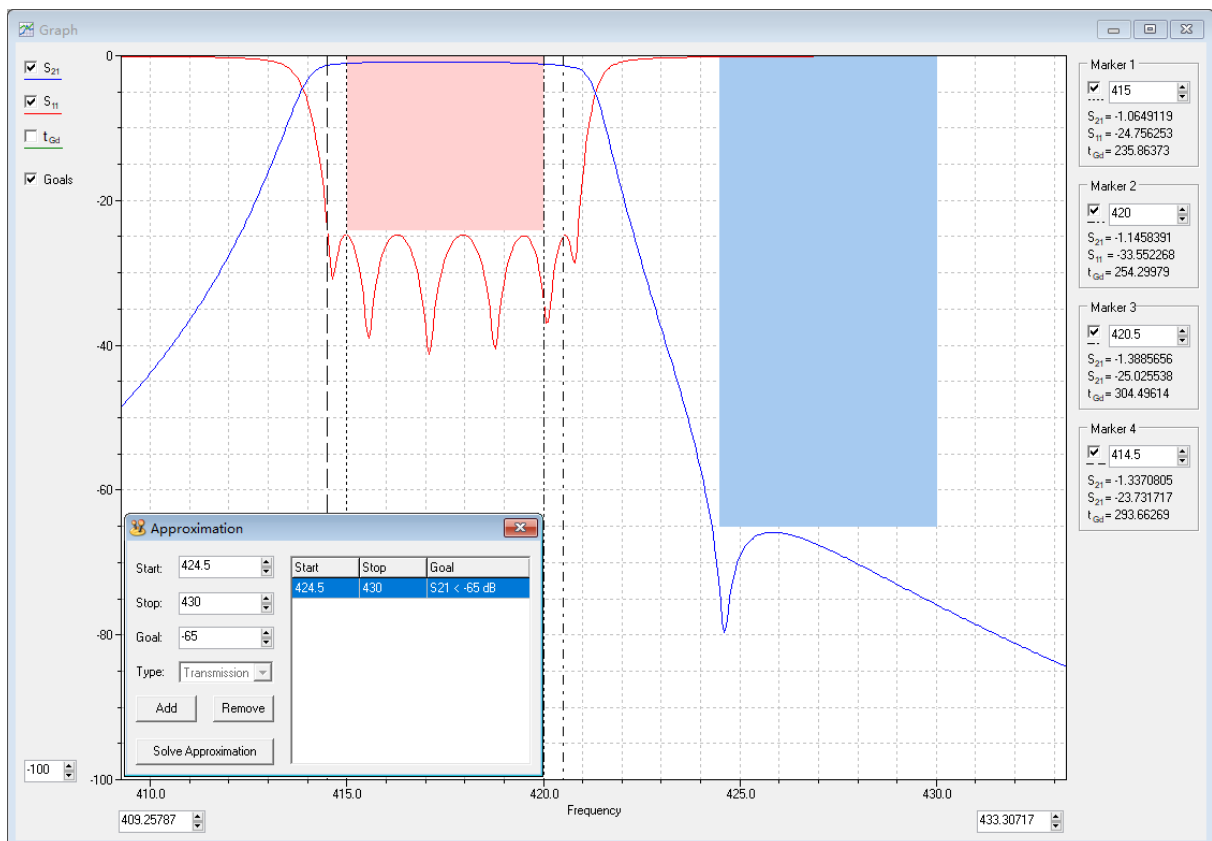


Figure 2 The simulation curve RX

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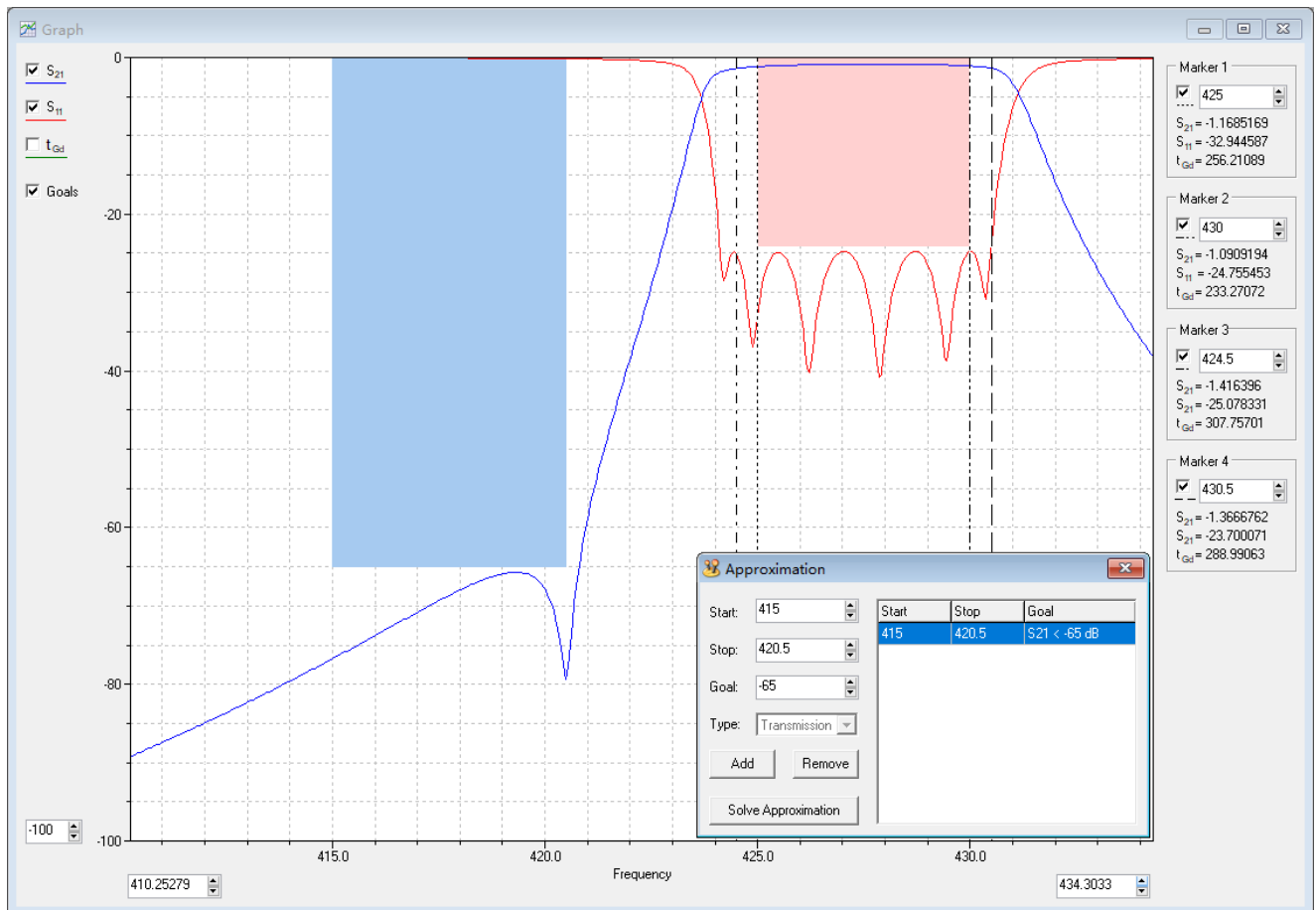


Figure 3 The simulation curve TX

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