

# Technical Proposal for JX-CD2-1920M2170M-70NS Cavity Duplexer

- ◆ Low Insertion Loss
- ◆ High Rejection
- ◆ High Reliability
- ◆ Small Volume

## Revision History

Version	Date	Author	Revision description	Comment
V1.0	2020/04/14	Lee	Created	/

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### 1. Mechanical layout

Table 1 Mechanical specifications @ JX-CD2-1920M2170M-70NS

Dimension	LxWxH: 70mm x 72mm x 24mm (30mm Max)
Port connectors	ANT: N-female Other: SMA-female
Finish	Silver
Notes	Material shall be RoHS 6/6

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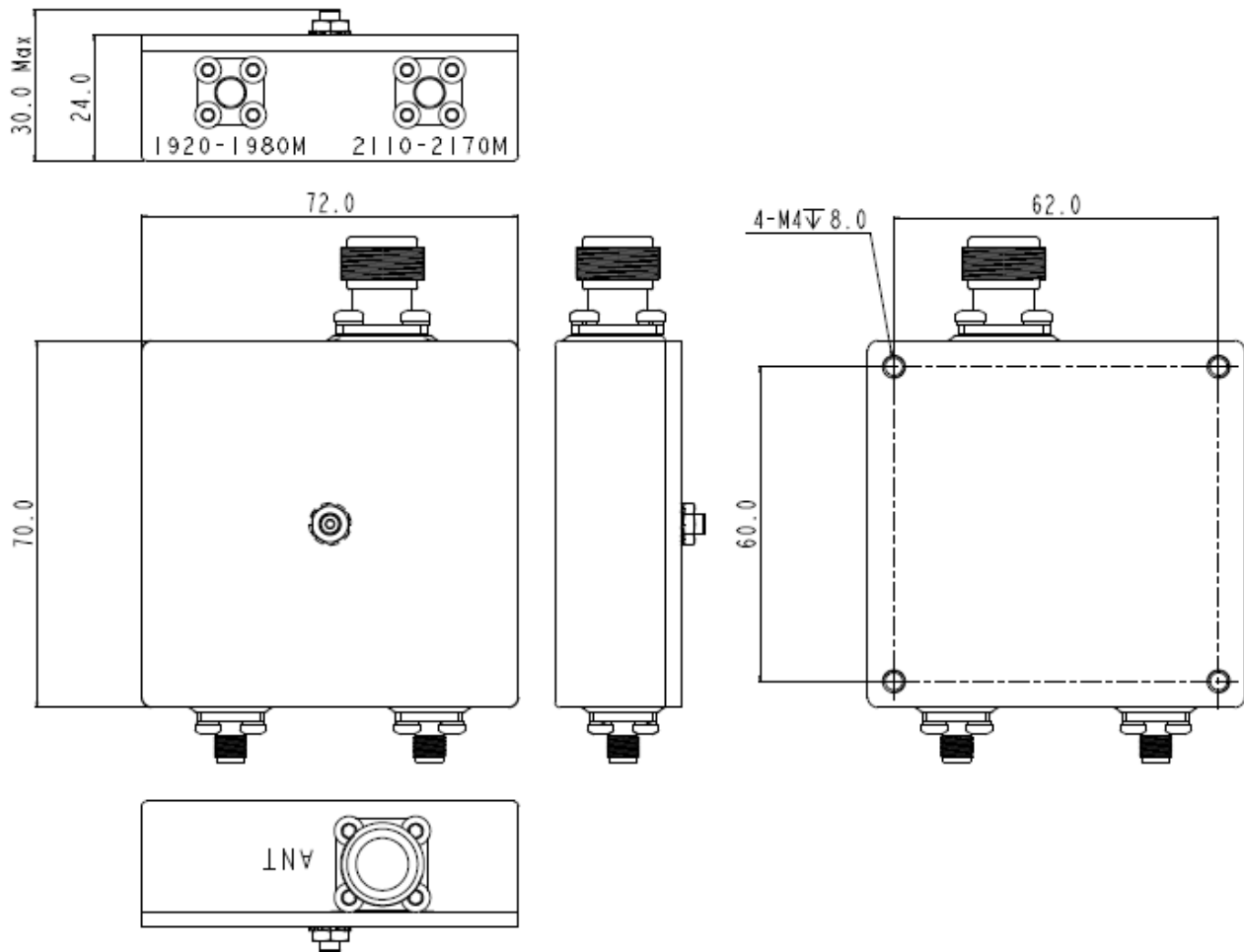


Figure 1 JX-CD2-1920M2170M-70NS front panel layout

## 2. Electrical analysis

### 2.1 Electrical specifications

Table 2 Electrical specifications @ JX-CD2-1920M2170M-70NS

Item	Parameter	RX	TX
1	Frequency range	1920-1980MHz	2110-2170MHz
2	Return loss	≥16dB	≥16dB
3	Insertion loss	≤0.5dB	≤0.5dB
4	Rejection	≥70dB@2110-2170MHz	≥70dB@1920-1980MHz
5	Maximum power handling	200W CW @ ANT port	
6	Impedance all ports	50Ohm	

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2.2 The simulation curve

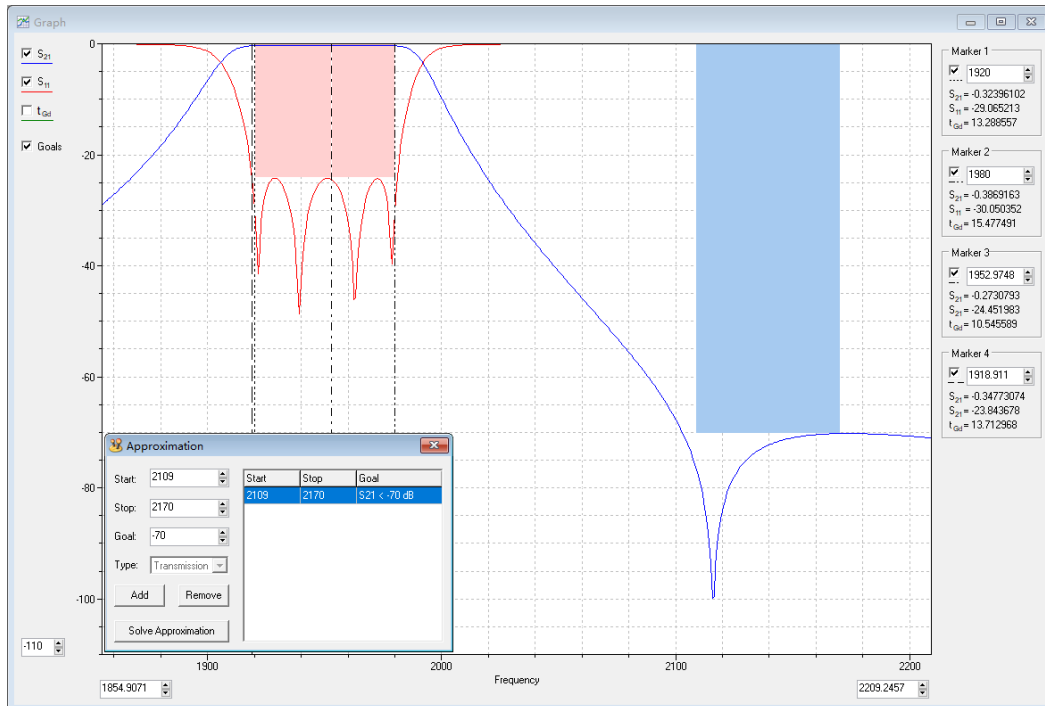


Figure 2 The simulation curve of 1920-1980MHz band

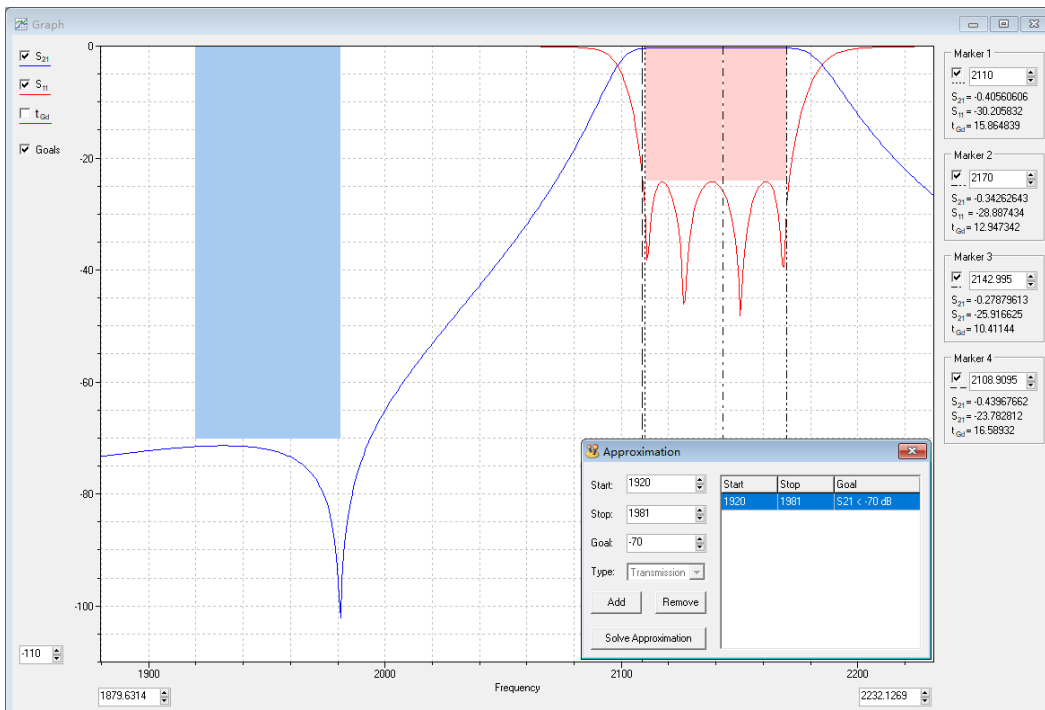


Figure 3 The simulation curve of 2110-2170MHz band

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