

Technical Proposal for JX-CD2-814M894M-70NWP Cavity Duplexer

- ◆ Low Insertion Loss
- ◆ High Rejection
- ◆ IP66 Outdoor Use
- ◆ High Reliability

Revision History

Version	Date	Author	Revision description	Comment
V1.0	2019/08/02	Lee	Created	/

JING XIN MICROWAVE TECHNOLOGY CO.,LTD

E-mail: sales@cdjx-mw.com Web: <http://www.cdjx-mw.com>

TEL: +86-28-85026087 FAX: +86-28-65026087 ext.8033 Zip Code:610045

Add: No.65,West 1st Wu Ke Road, Wu Hou District, Cheng Du City, Si Chuan Province, China.

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1. Mechanical layout

Table 1 Mechanical specifications @ JX-CD2-814M894M-70NWP

Dimension	LxWxH: 175mm x 145mm x 44mm
Port connectors	N-female 4 holes flange
Finish	Gray, Akzo Nobel RA7035, Powder spraying
Application environment	Outdoor use / IP66
Mounting	4-M4 screws
Notes	Material shall be RoHS 6/6

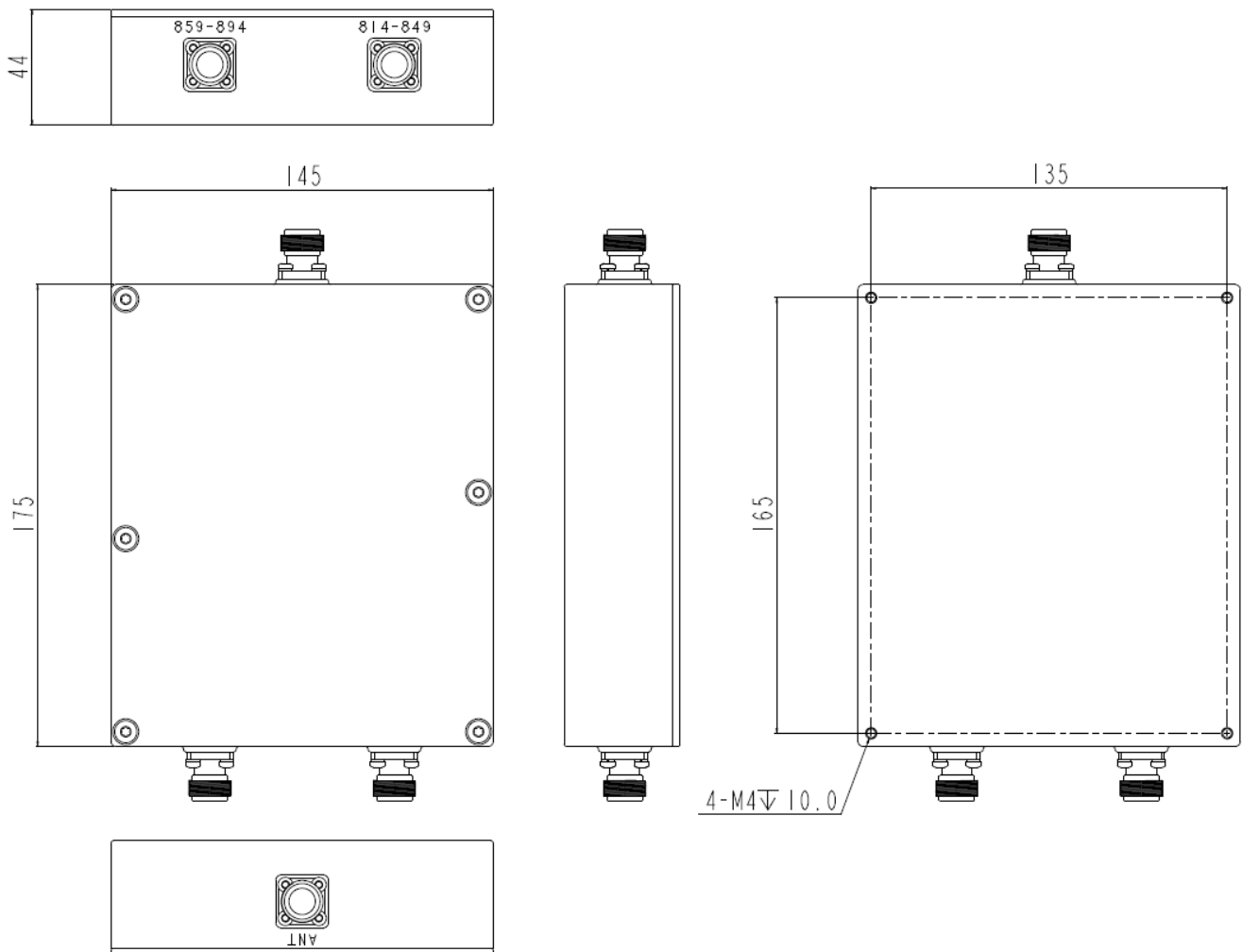


Figure 1 JX-CD2-814M894M-70NWP front panel layout

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2. Electrical analysis

2.1 Electrical specifications

Table 2 Electrical specifications @ JX-CD2-814M894M-70NWP

Item	Parameter	LOW	HIGH
1	Frequency range	814-849 MHz	859-894 MHz
2	Return loss	≥18 dB	≥18 dB
3	Insertion loss	≤1.1 dB	≤1.1 dB
4	In-band ripple	≤0.9 dB	≤0.9 dB
5	Rejection	≥70 dB@859-894 MHz	≥70 dB@814-849 MHz
6	Maximum Power Handling	100 W	
7	Impedance all ports	50 Ohm	
8	Temperature range	-20 °C to +70 °C	

2.2 The simulation curve

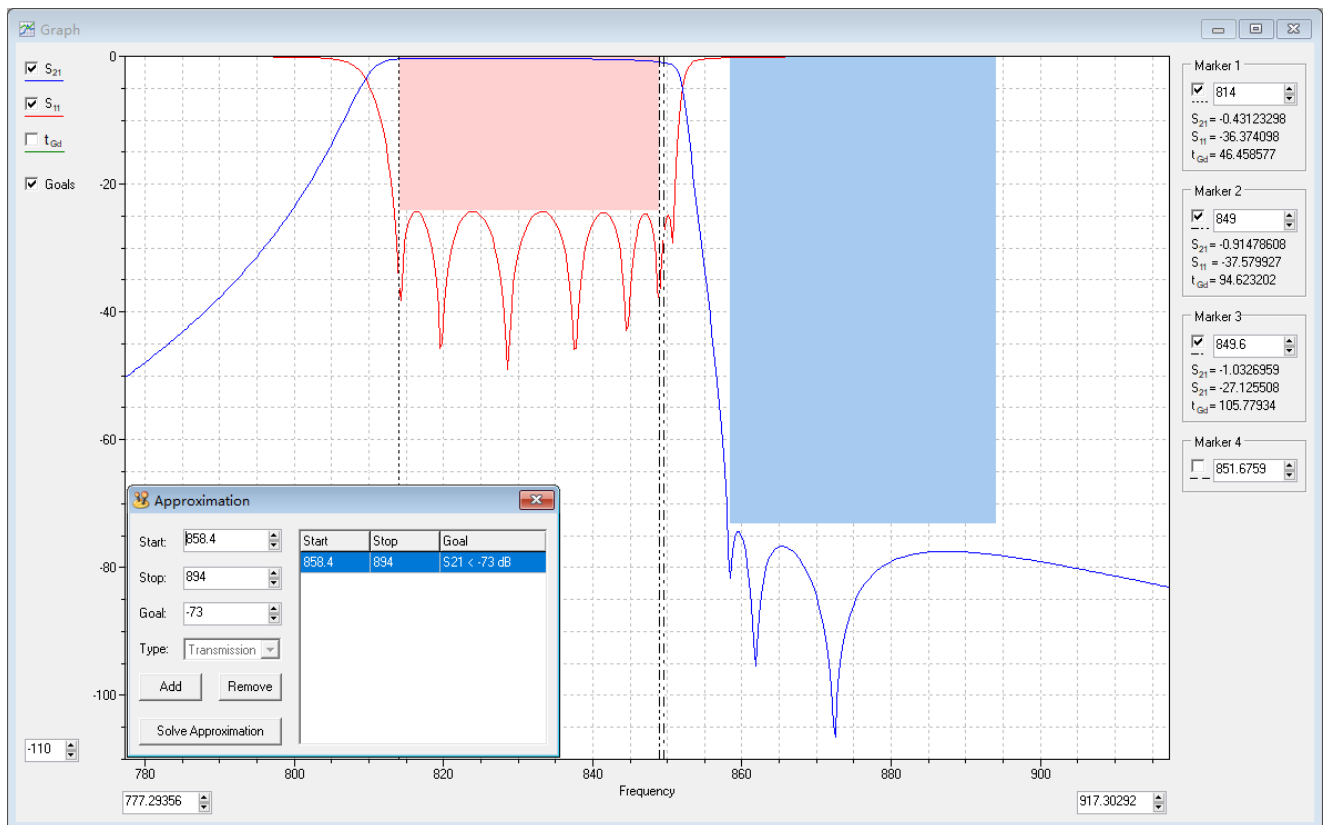


Figure 2 The simulation curve of 814-849MHz band

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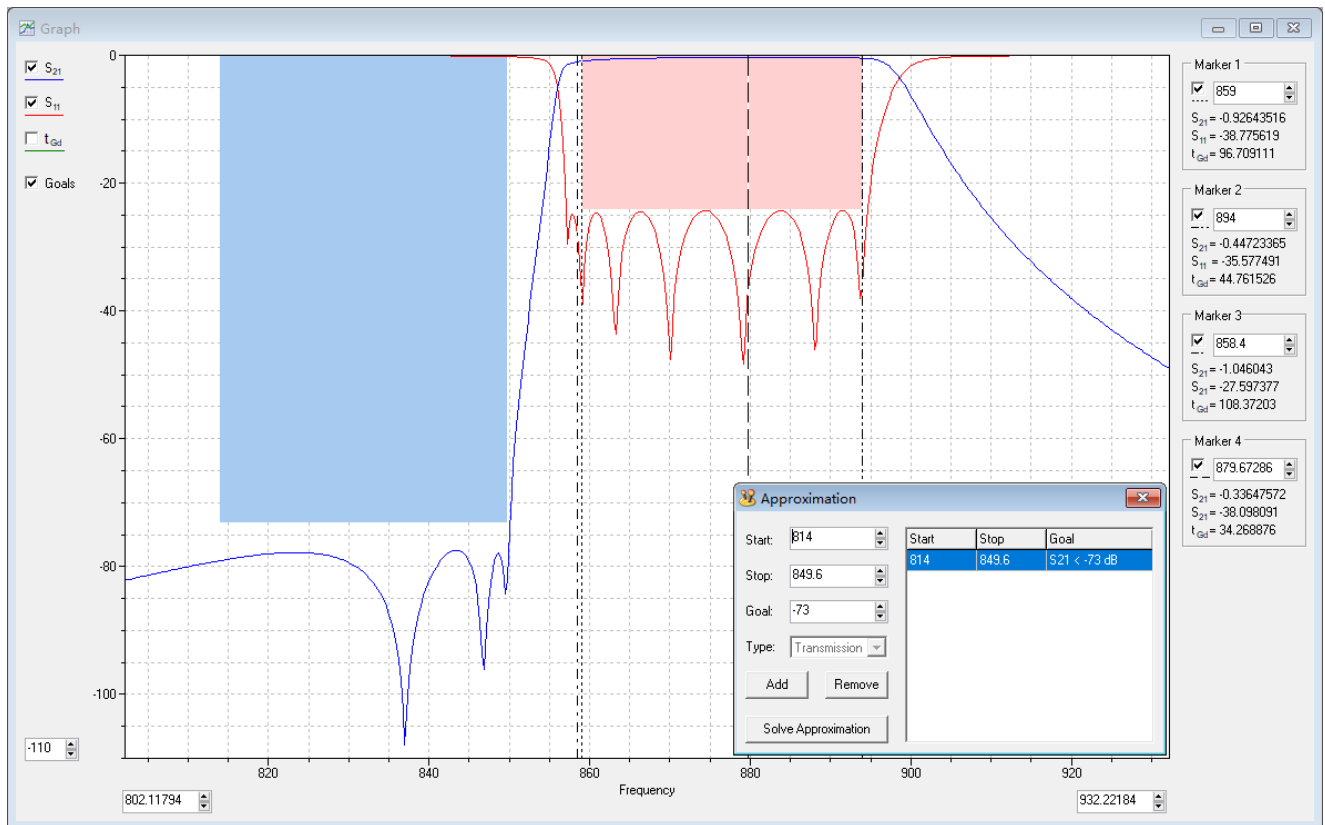


Figure 3 The simulation curve of 859-894MHz band

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