

Technical proposal for JX-CD2-703M803M-70S Cavity Duplexer

- ◆ Small Volume
- ◆ High Reliability

Revision History

Version	Date	Author	Revision description	Comment
V1.0	2022/01/20	Sam Chen	Created	/

Table of content

Technical proposal for JX-CD2-703M803M-70S Cavity Duplexer	1
1. Mechanical layout.....	2
2. Electrical analysis.....	3
2.1 Schematic diagram of the Duplexer	3
2.2 Electrical specifications	3
2.3 The simulation curve	4

Figures

Figure 1 JX-CD2-703M803M-70S front panel layout	2
Figure 2 Toplogy of the Duplexer	3
Figure 3 The simulation curve of the Duplexer	4

Tables

Table 1 Mechanical specifications @ JX-CD2-703M803M-70S.....	2
Table 2 Electrical specifications @ JX-CD2-703M803M-70S	3

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.

1. Mechanical layout

Table 1 Mechanical specifications @ JX-CD2-703M803M-70S

Dimension	LxWxH: 150mm x 122mm x 36mm (42.0mm Max)
Port connectors	SMA-Female
Finish	Black
Notes	Material shall be RoHS 6/6

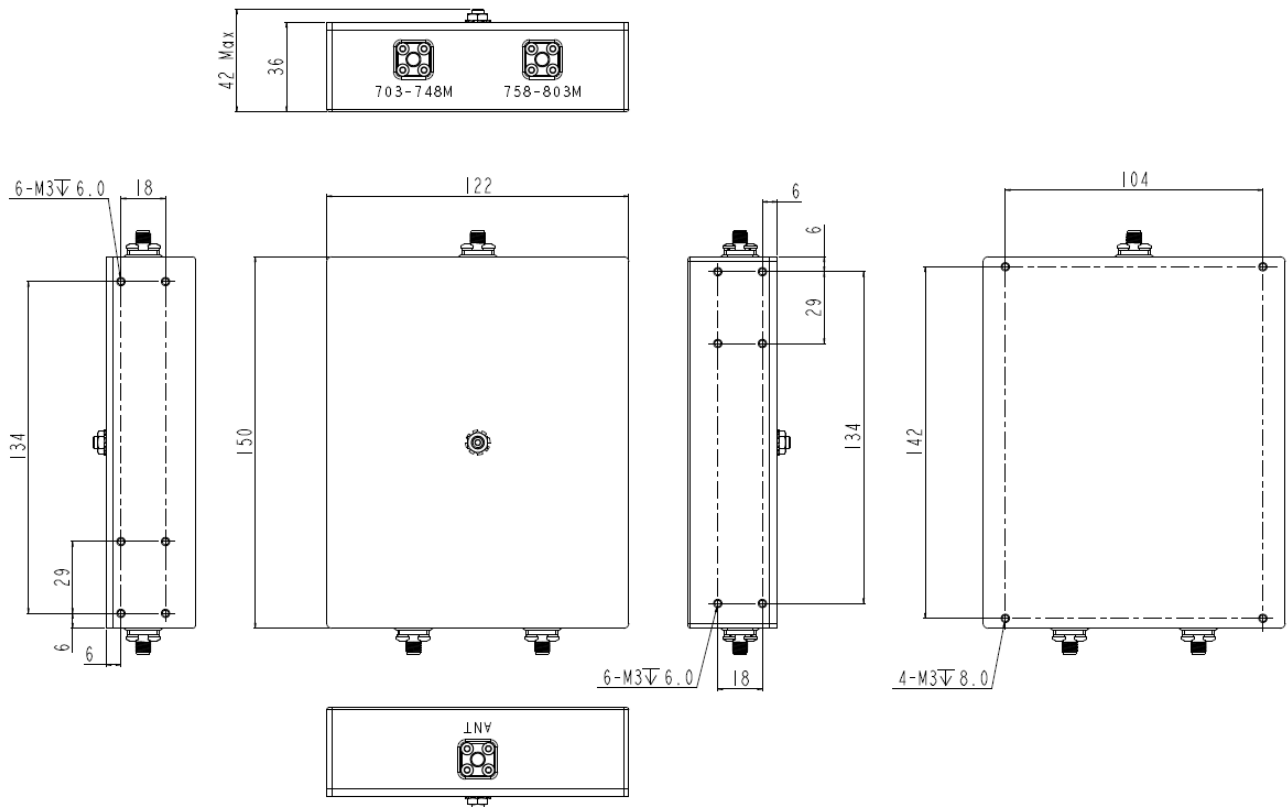


Figure 1 JX-CD2-703M803M-70S front panel layout

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.

2. Electrical analysis

2.1 Schematic diagram of the Duplexer

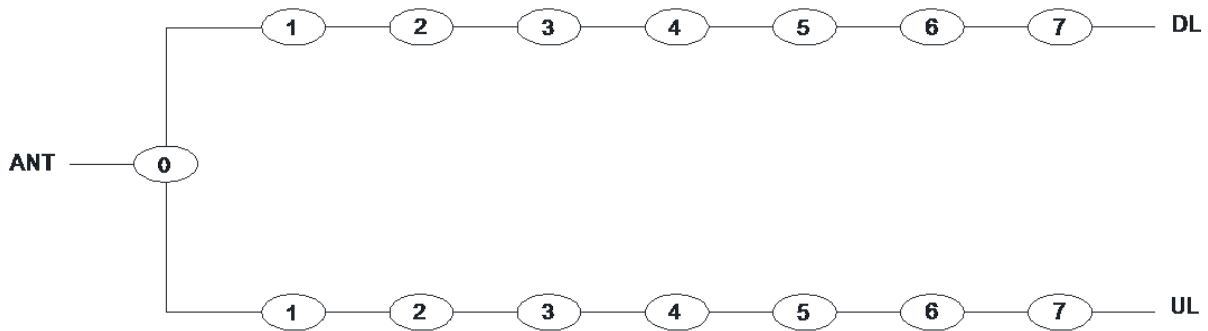


Figure 2 Toplogy of the Duplexer

2.2 Electrical specifications

Table 2 Electrical specifications @ JX-CD2-703M803M-70S

Item	Parameter	DL	UL
1	Frequency range	758-803 MHz	703-748 MHz
2	Return loss	≥17 dB	≥17 dB
3	Insertion loss	≤1.0 dB	≤1.0 dB
4	Rejection	≥70dB@703-748 MHz	≥70dB@758-803 MHz
5	power	100 W	1 W
6	Temperature	-40°C to +85°C	
7	Impedance	50 Ω	

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.

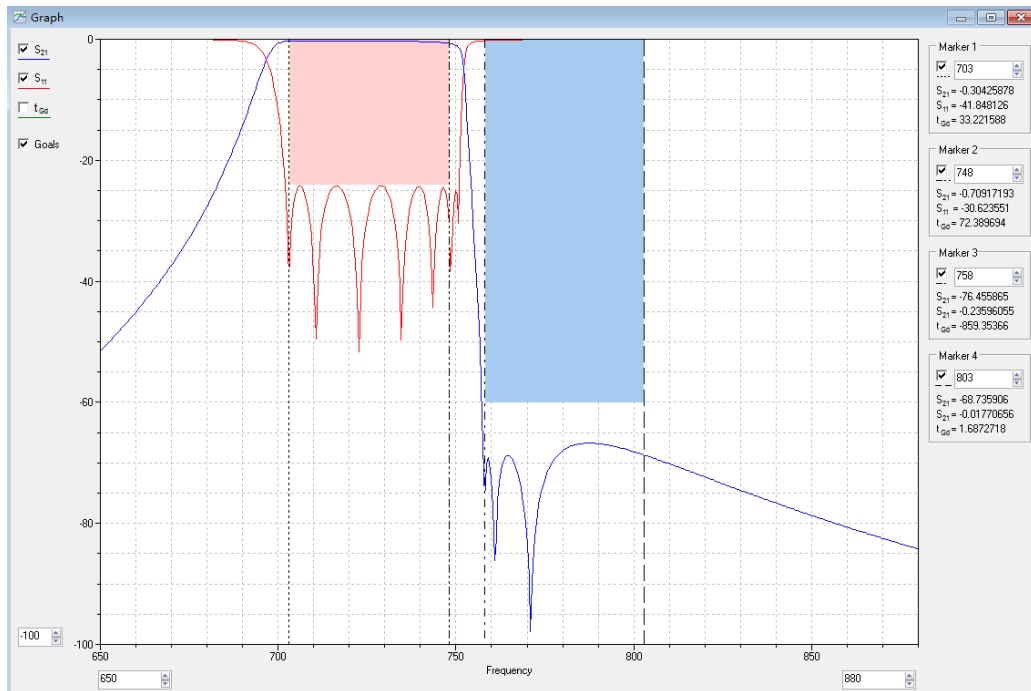
Professional manufacturer of
passive microwave components

JX-CD2-703M803M-70S_20/01/2022_Rev:V1.0



2.3 The simulation curve

703-748MHz



758-803MHz

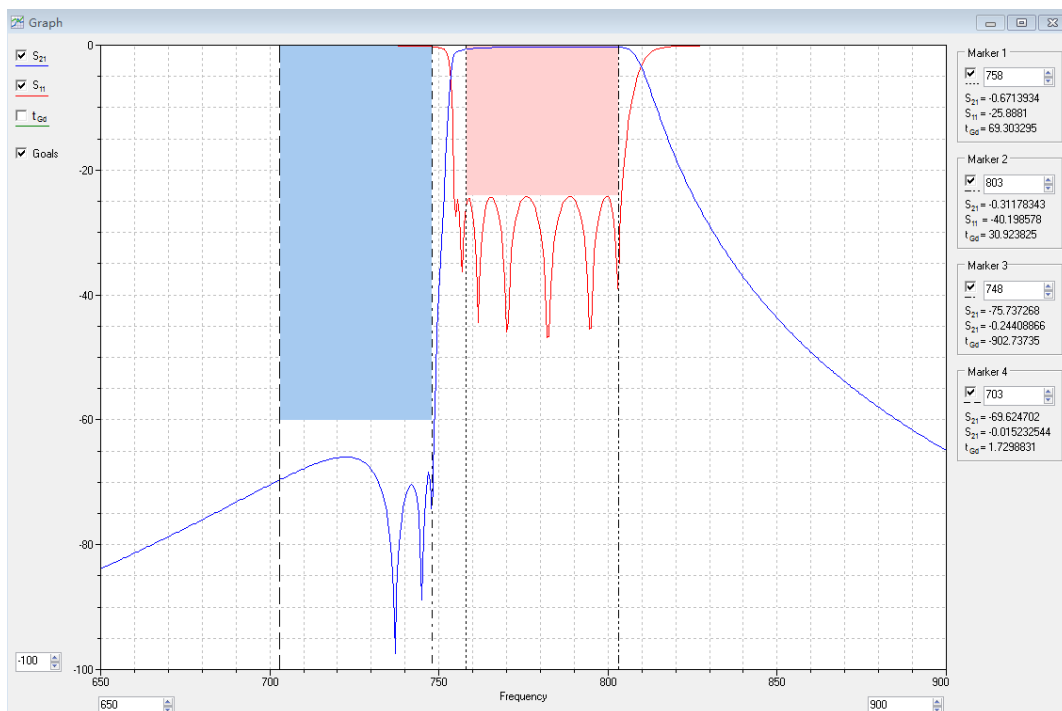


Figure 3 The simulation curve of the Duplexer

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.