

# Technical Proposal for JX-CF1-4.6G8.5G-30S1 Cavity Filter

◆ High Performance

◆ High Reliability

## Revision History

Version	Date	Author	Revision description	Comment
V1.0	2023/02/22	Lee	Created	/

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**JING XIN MICROWAVE TECHNOLOGY CO.,LTD**

E-mail: [sales@cdjx-mw.com](mailto: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-CF1-4.6G8.5G-30S1

Dimension	L x W x H: 120mm x 26mm x 13mm (Max16mm)
Port connectors	SMA-Male / SMA-Female
Finish	Black spray paint
Notes	Material shall be RoHS 6/6

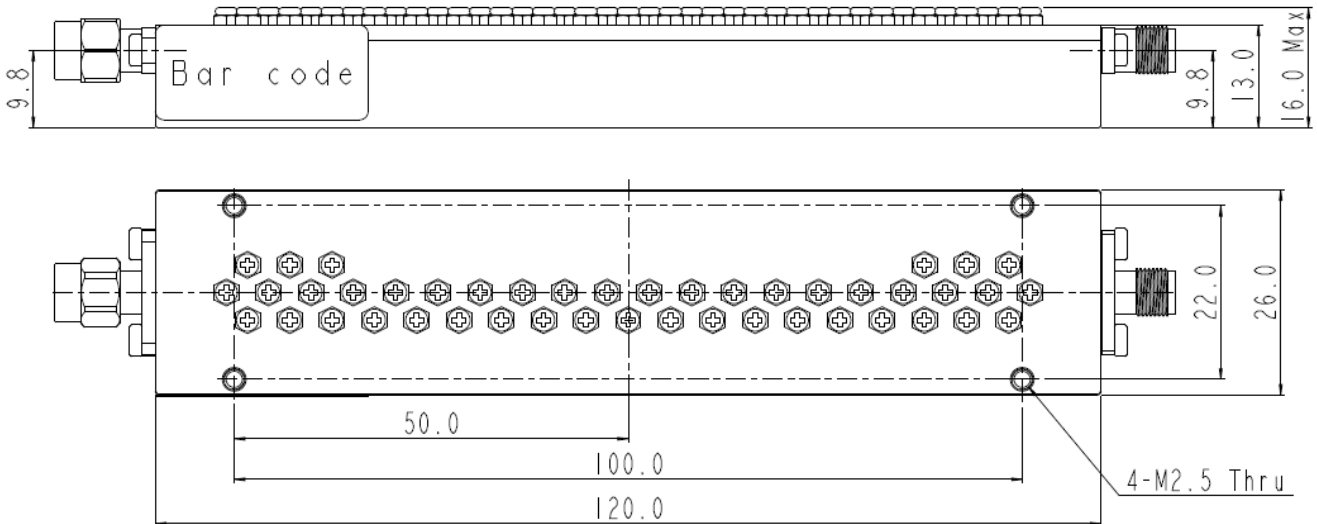


Figure 1 JX-CF1-4.6G8.5G-30S1 front panel layout

## 2. Electrical analysis

### 2.1 Electrical specifications

Table 2 Electrical specifications @ JX-CF1-4.6G8.5G-30S1

Item	Parameter	Specification
1	Frequency range	4.6-8.5GHz
2	Return loss	$\geq 12\text{dB}$ (type15dB)
3	Insertion loss	$\leq 1.3\text{dB}$
4	Ripple in band	$\leq 0.8\text{dB}$
5	Rejection	$\geq 80\text{dB}$ @ DC-3.1GHz
		$\geq 18\text{dB}$ @ 3.1-4.4GHz
		$\geq 30\text{dB}$ @ 8.73-12GHz
6	Temperature range	-30°C to +70°C
7	Power	5W

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8	Impedance	50Ω
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## 2.2 The simulation curve

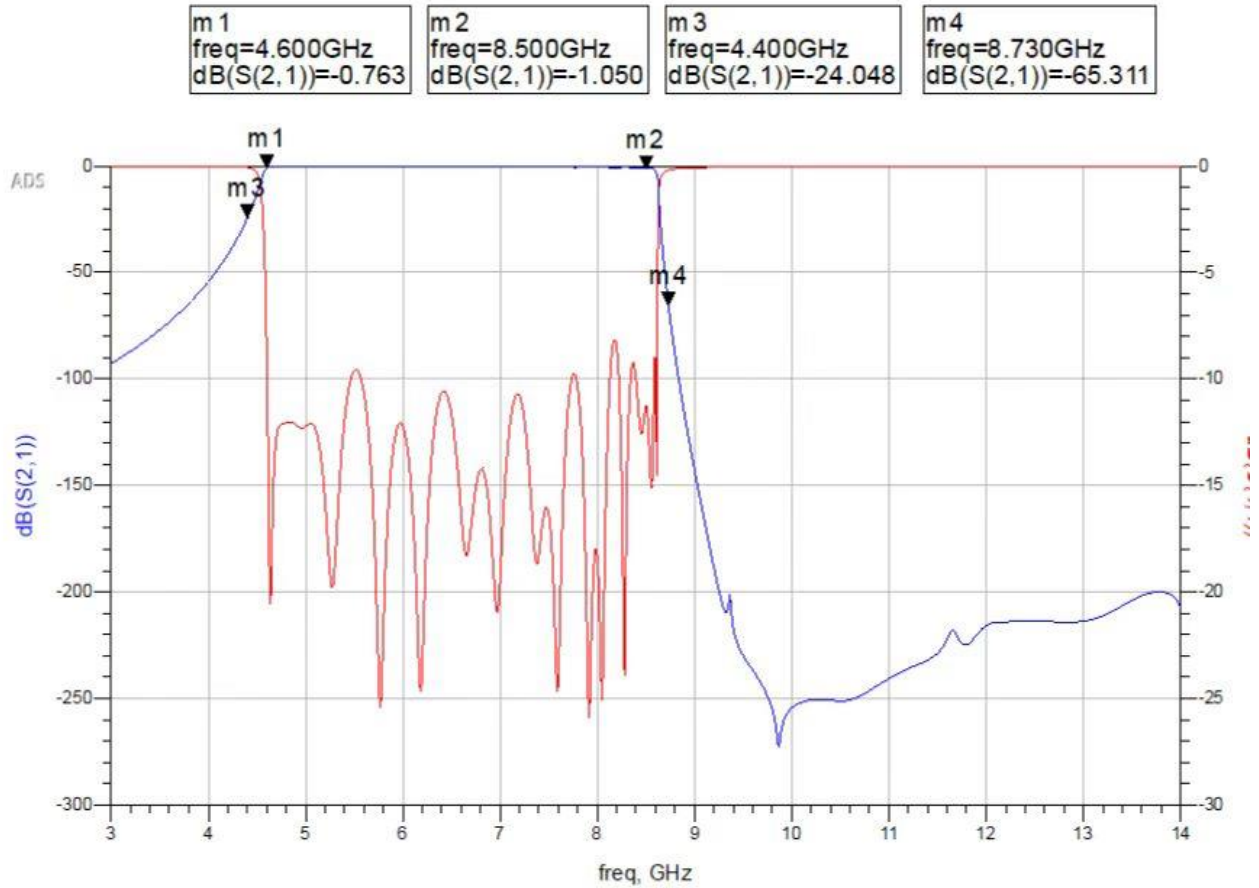


Figure 2 The simulation curve of the filter

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