

# Technical Proposal for JX-CF1-14.1G18G-S20 Cavity Filter

◆ High Performance

◆ High Reliability

## Revision History

Version	Date	Author	Revision description	Comment
V1.0	2023/02/23	Sam Chen	Created	/
V1.1	2023/02/24	Sam Chen	Updated the simulation curve	Customer request

## Table of content

Technical Proposal for JX-CF1-14.1G18G-S20 Cavity Filter.....	1
1. Mechanical layout.....	2
2. Electrical analysis.....	2
2.1 Electrical specifications .....	2
2.2 The simulation curve .....	3

## Figures

Figure 1 JX-CF1-14.1G18G-S20 front panel layout .....	2
Figure 2 The simulation curve of the filter .....	3

## Tables

Table 1 Mechanical specifications @ JX-CF1-14.1G18G-S20 .....	2
Table 2 Electrical specifications @ JX-CF1-14.1G18G-S20 .....	2

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## 1. Mechanical layout

Table 1 Mechanical specifications @ JX-CF1-14.1G18G-S20

Dimension	L x W x H: 90mm x 16mm x 10.5mm (Max13mm)
Port connectors	SMA-Male / SMA-Female
Finish	Black spray paint
Notes	Material shall be RoHS 6/6

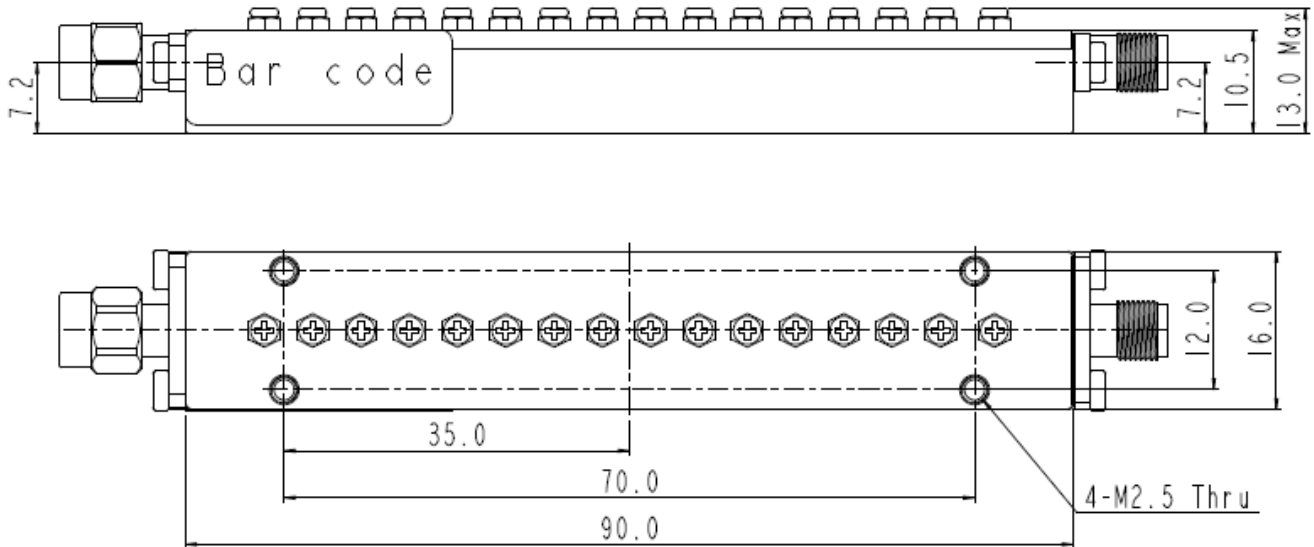


Figure 1 JX-CF1-14.1G18G-S20 front panel layout

## 2. Electrical analysis

### 2.1 Electrical specifications

Table 2 Electrical specifications @ JX-CF1-14.1G18G-S20

Item	Parameter	Specification
1	Frequency range	14.1-18GHz
2	Return loss	≥14dB (type16dB)
3	Insertion loss	≤1.5dB
4	Ripple in band	≤1.0dB
5	Rejection	≥80dB @ DC-12.9GHz ≥30dB @ 12.9-13.9GHz ≥30dB @ 18.45-18.85GHz ≥80dB @ 18.85-27GHz

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6	Temperature range	-30°C to +70°C
7	Power	5W
8	Impedance	50Ω

## 2.2 The simulation curve

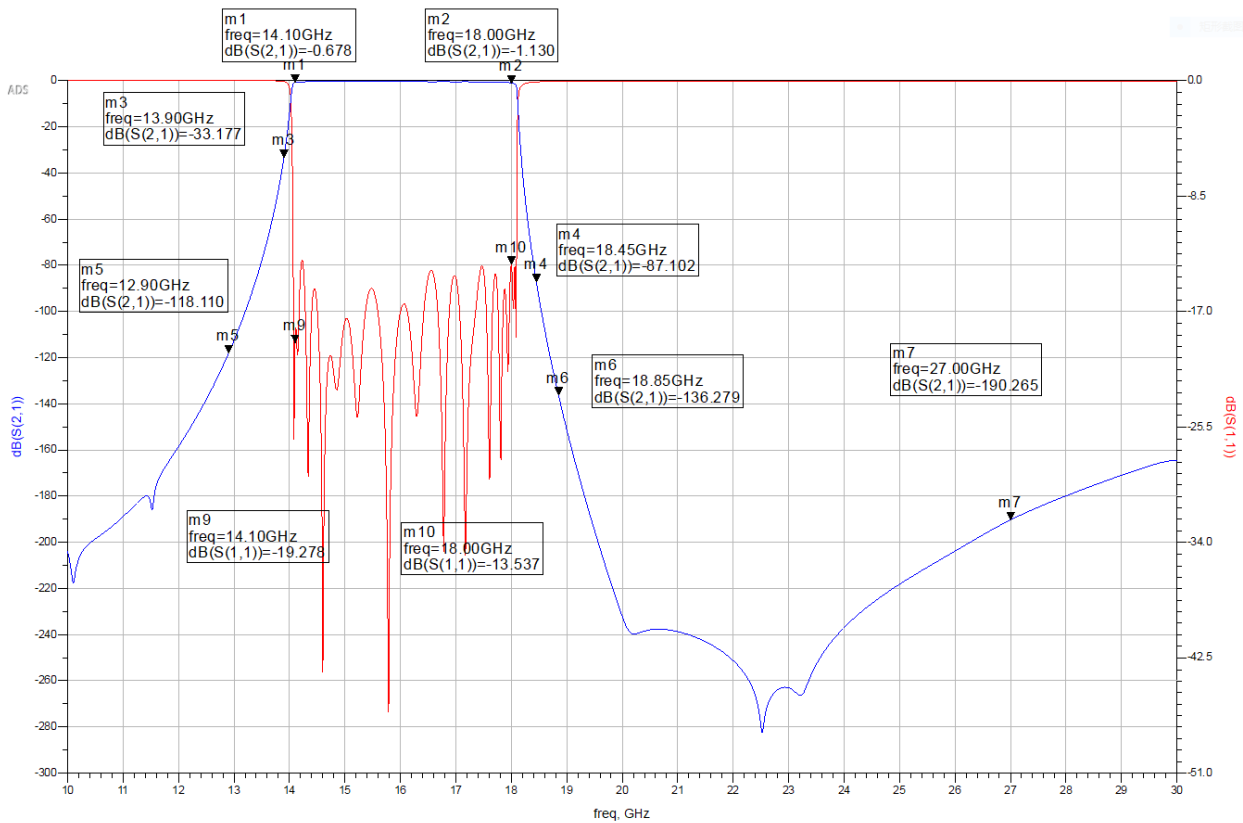


Figure 2 The simulation curve of the filter

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