

# Technical Proposal for JX-CF1-8.6G12.5G-30S2 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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## 1. Mechanical layout

Table 1 Mechanical specifications @ JX-CF1-8.6G12.5G-30S2

Dimension	L x W x H: 110mm x 18mm x 10.5mm (Max13mm)
Port connectors	SMA-Male / SMA-Female
Finish	Black spray paint
Notes	Material shall be RoHS 6/6

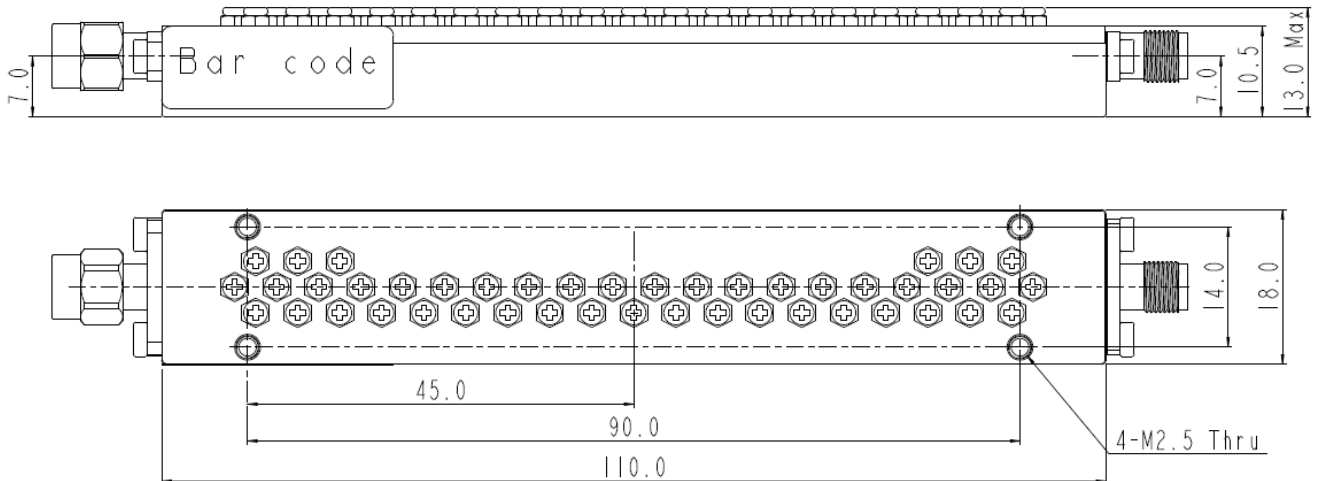


Figure 1 JX-CF1-8.6G12.5G-30S2 front panel layout

## 2. Electrical analysis

### 2.1 Electrical specifications

Table 2 Electrical specifications @ JX-CF1-8.6G12.5G-30S2

Item	Parameter	Specification
1	Frequency range	8.6-12.5GHz
2	Return loss	≥15dB (type18dB)
3	Insertion loss	≤1.5dB
4	Ripple in band	≤0.8dB
5	Rejection	≥80dB @ DC-7.5GHz ≥28dB @ 7.5-8.4GHz ≥30dB @ 12.9-13.15GHz ≥80dB @ 13.15-17GHz
6	Temperature range	-30°C to +70°C

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7	Power	5W
8	Impedance	50Ω

## 2.2 The simulation curve

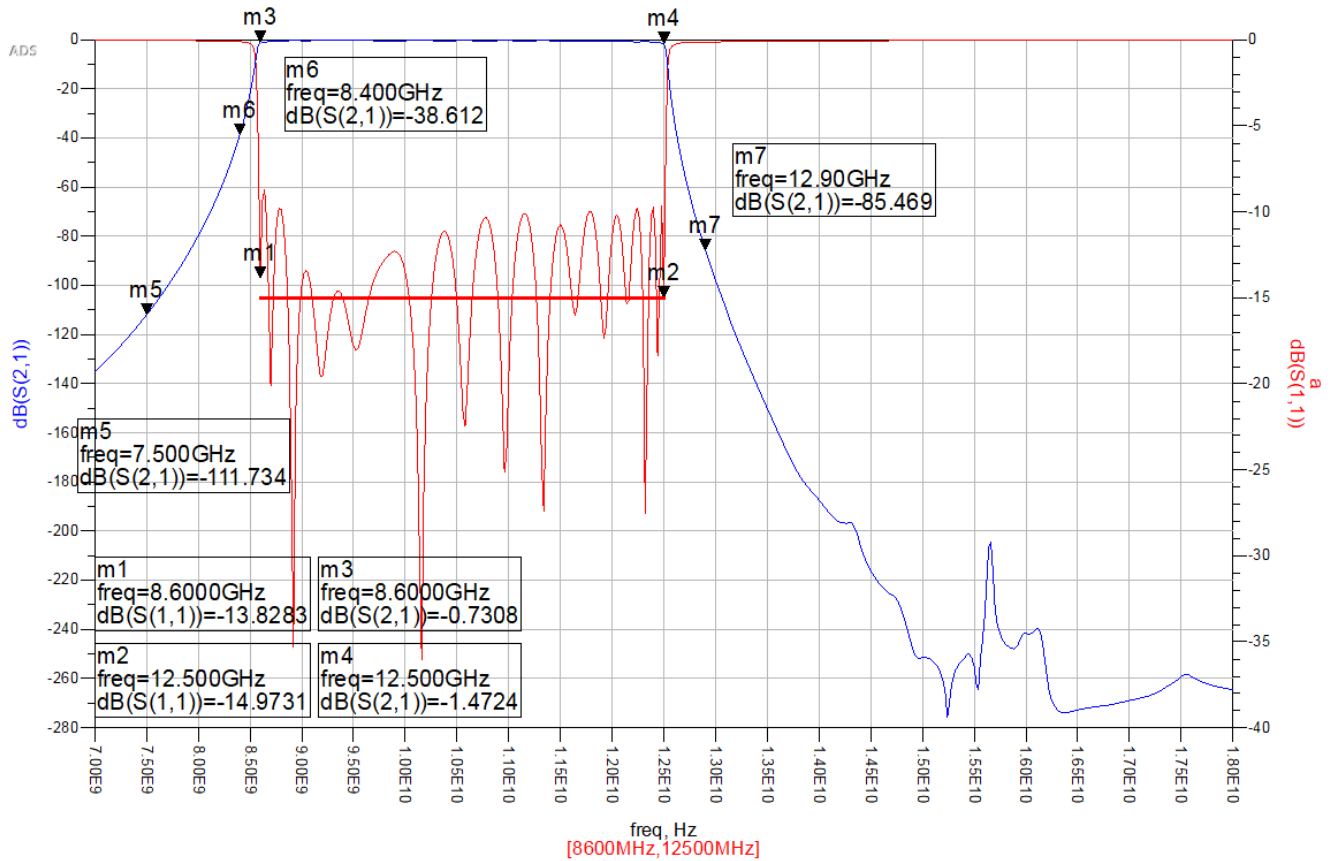


Figure 2 The simulation curve of the filter

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