

# Technical proposal for JX-CF-PS800-F2 Cavity Filter

## Revision History

Version	Date	Author	Revision description	Comment
V1.0	2017/09/12	Lee	Created	/

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## Table of content

Technical proposal for JX-CF-PS800-F2 Cavity Filter .....	1
1. Mechanical layout.....	3
2. Electrical analysis .....	3
2.1 Schematic diagram of the Filter.....	3
2.2 Electrical specifications .....	4
2.3 The simulation curve .....	4

## Figures

Figure 1 JX-CF-PS800-F2 front panel layout .....	3
Figure 2 Topology of the Filter.....	3
Figure 3 The simulation curve of the Filter .....	4

## Tables

Table 1 Mechanical Specifications .....	3
Table 2 Electrical specifications @ JX-CF-PS800-F2 .....	4

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## 1. Mechanical layout

Table 1 Mechanical Specifications

Dimension	LxWxH: 134mm x 131mm x 36mm (Max 43mm)
Port connectors	SMA 4 hole panel receptacle plug
Finish	Silver
Notes	Material shall be RoHS 6/6

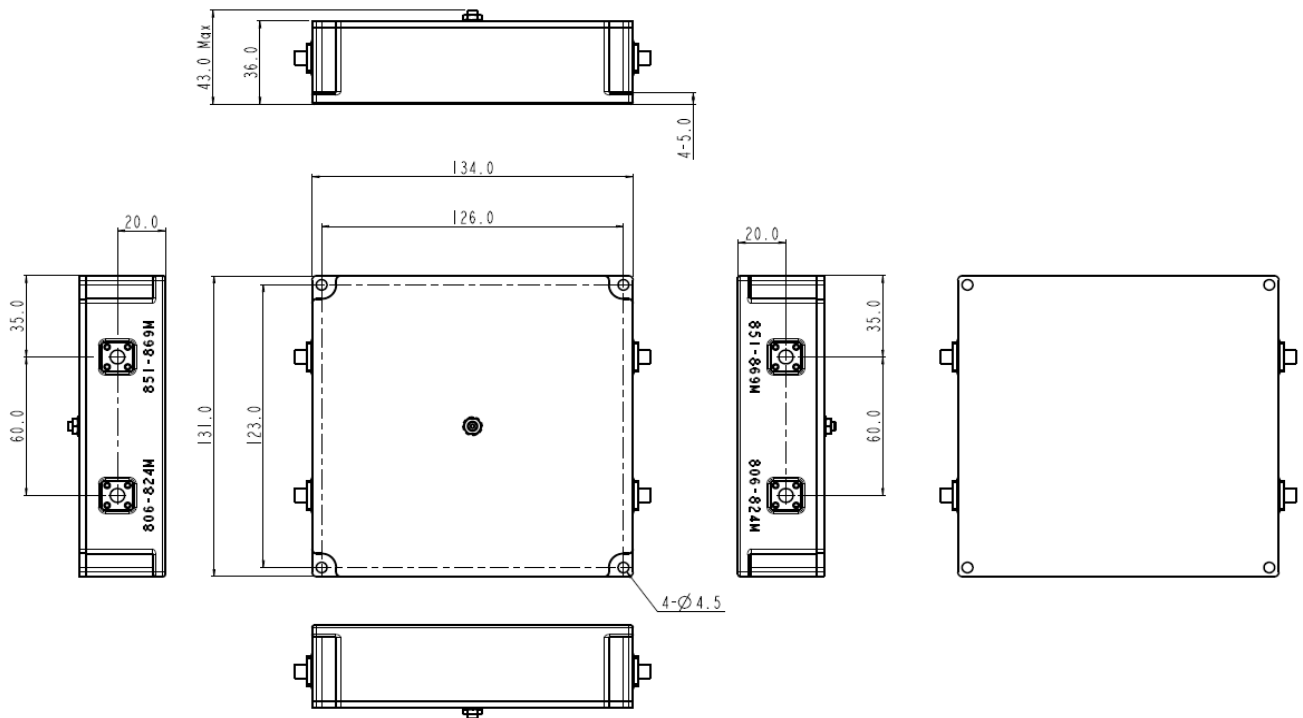


Figure 1 JX-CF-PS800-F2 front panel layout

## 2. Electrical analysis

### 2.1 Schematic diagram of the Filter

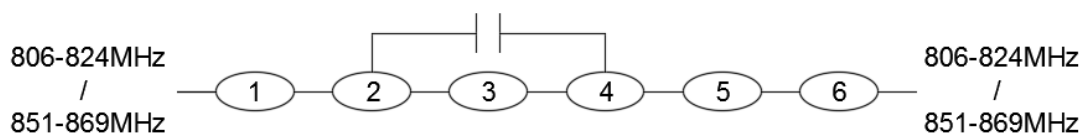


Figure 2 Topology of the Filter

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2.2 Electrical specifications

Table 2 Electrical specifications @ JX-CF-PS800-F2

Item	Frequency Range	806-824MHz	851-869MHz	JX Suggest
1	Return loss (Normal Temp)	≥18 dB	≥18 dB	OK
	Return loss (Full Temp)	≥18 dB	≥18 dB	≥16 dB
2	Insertion loss (Normal Temp)	≤1.0 dB	≤1.0 dB	OK
	Insertion loss (Full Temp)	≤1.0 dB	≤1.0 dB	OK
3	In-band ripple (Full Temp)	≤0.8 dB	≤0.8 dB	OK
4	Rejections (Full Temp)	≥80dB@851-869MHz	≥80dB@806-824MHz	OK
5	Impedance all ports	50 Ohms		OK
6	Temperature Range	-30°C to 60°C		OK

2.3 The simulation curve

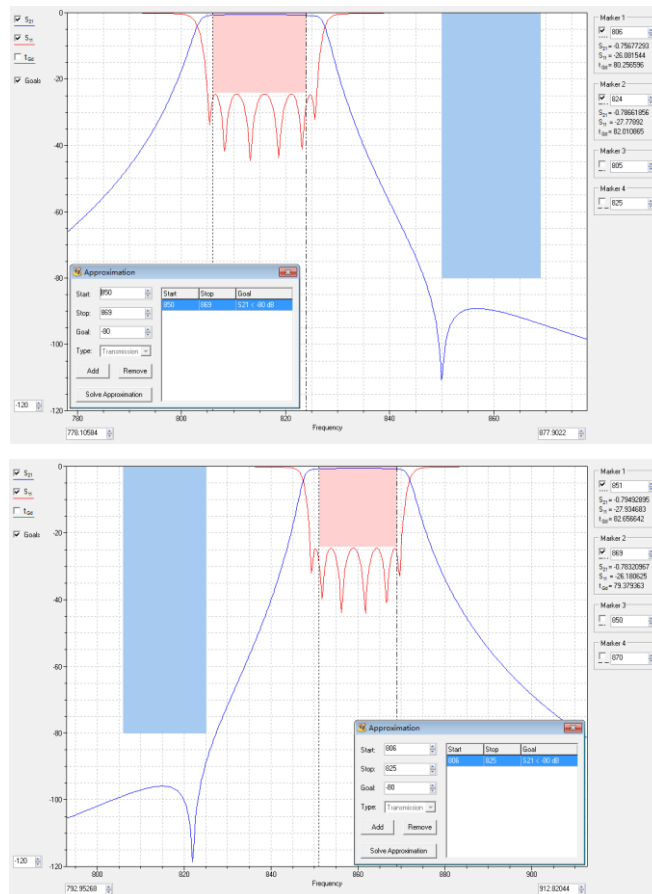


Figure 3 The simulation curve of the Filter

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