

# Switched Filter Bank – 7 Channel RF Pre-selector (Passbands 100 - 7000 MHz) (Stopbands to 20 GHz)



## Description

Spectrum Microwave's 7-Channel RF Pre-selector filter provides 7 selectable RF filter channels with Ultimate Rejections out to 18 GHz. Modular construction allows customization of band splits to provide continuous overlapping band performance.

Channels 1 thru 6 are Miniature Lumped Element Bandpass Filters while Channel 7 is an Interdigital Cavity Filter. This low-profile Filter Bank provides Excellent Low-Ripple Passband Performance while Suppressing Ultimate Rejections by 70 dB out to 20 GHz.

Three control pins provide TTL selection of the desired operating channel. The unit is bi-directional with SMA field removable connectors.

## Dimensions and Connections

TBD L x 3.10" W x 0.35" H excluding SMA connectors and control pins. Final length depends upon customer requirements for filter performance.

The chassis is machined aluminum with a silver plate finish. Control pins are .030" dia.

## Features

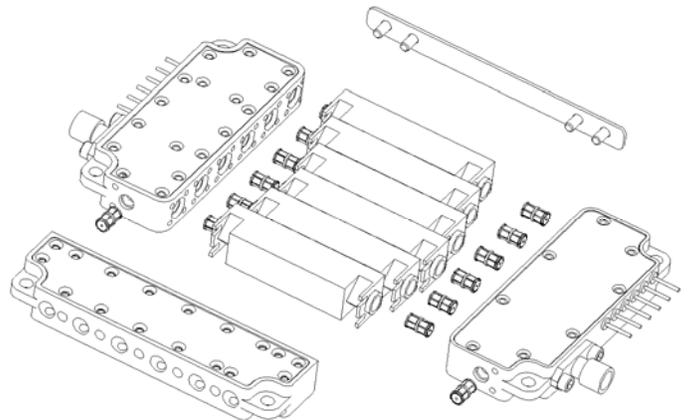
- 70 dB Ultimate Rejections to 20 GHz
- High Linearity: (IP<sub>3</sub>... +44 dBm)
- Fast Switching Speed: 200 nsec
- Low Video Feed-thru: 1.5mV

## Typical Specifications

Frequency Range	100 – 7000 MHz
Switching Speed	200 nsec
Input 1 dB Comp	+15 dBm
Amplitude Ripple	0.5 dB
IP3	44 dBm
VSWR	1.8:1 max
Insertion Loss	9 dB
Switching Type	TTL
DC Power	5V @ 50 mA -5V @ 45 mA
Temp Range	-10 °C to +65 °C

All specifications above measured at 25 °C

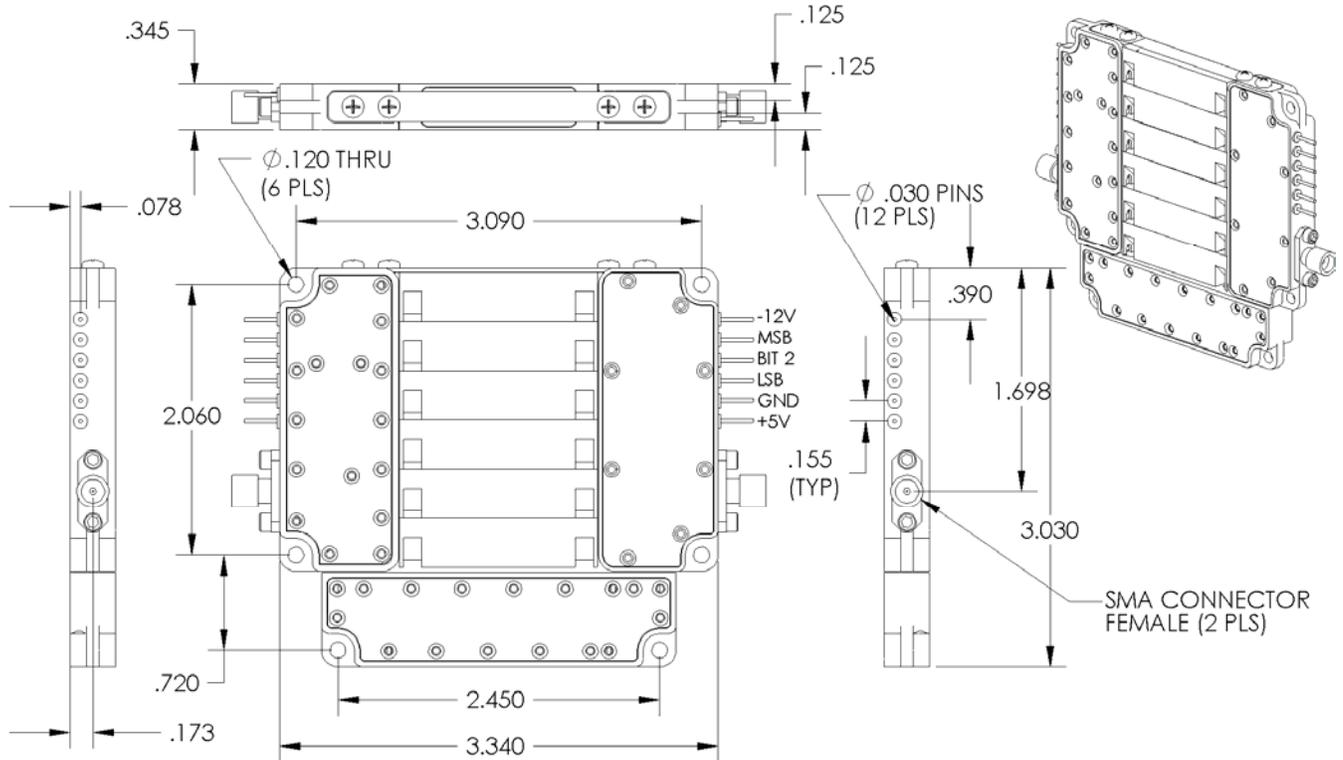
## Exploded View



# Switched Filter Bank – 7 Channel

RF Preselector (Passband 100 - 7000 MHz; Stopbands to 20 GHz)

## Outline Drawing



## Block Diagram

