

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. 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

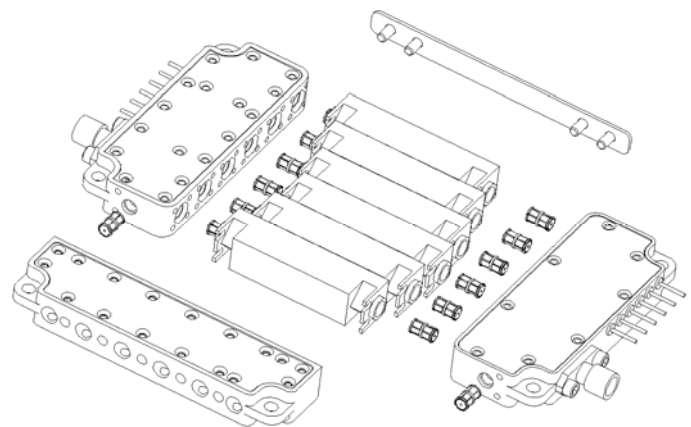
- 70 dB Ultimate Rejections to 20 GHz
- High Linearity: (IP₃... +44 dBm)
- Fast Switching Speed: 200 nsec
- Low Video Feed-thru: 1.5mV

Typical Specifications

Frequency Range	100 – 7000 MHz
Switching Speed	200 nsec
Input 1 dB Comp	+15 dBm
Amplitude Ripple	0.5 dB
IP ₃	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.

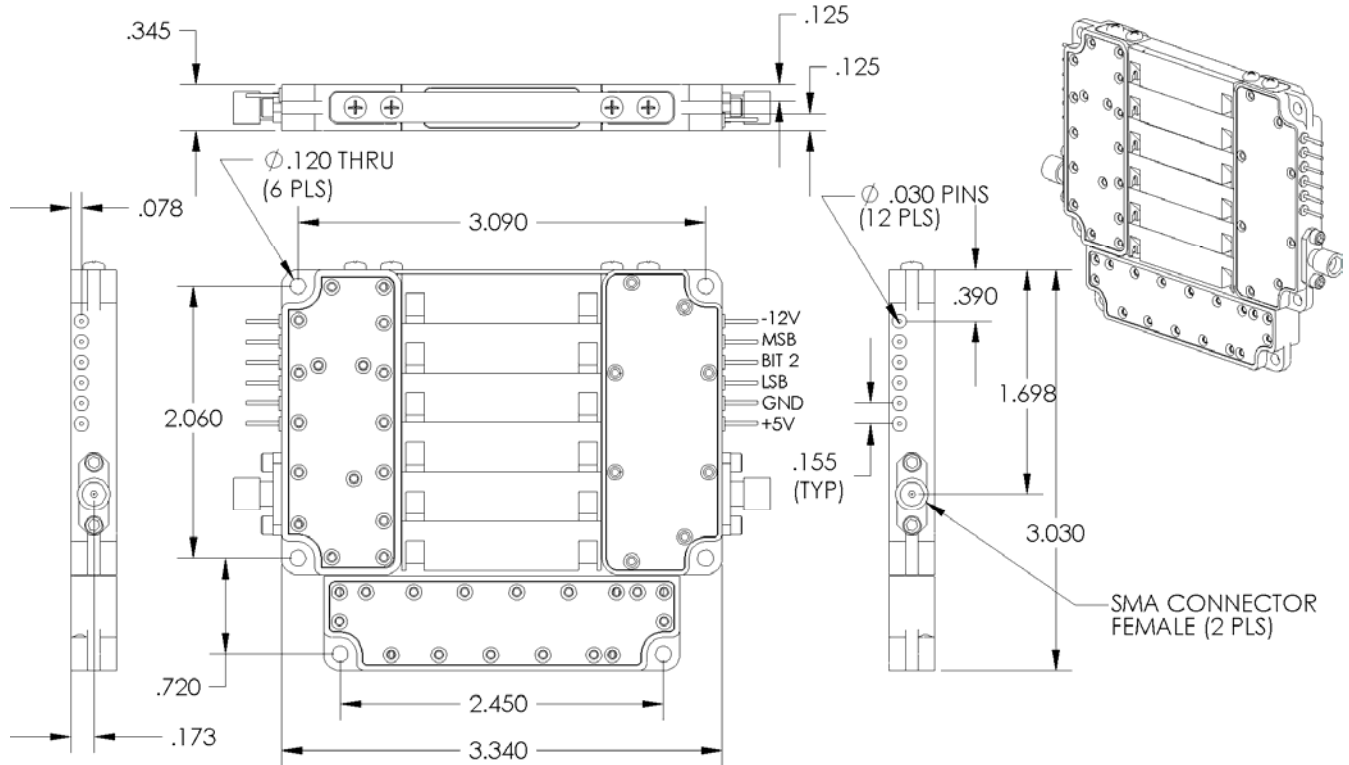
Exploded view



Dimensions and Connections

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Outline Drawing



Block diagram

