

# GUZIK PRODUCT BULLETIN

## Programmable Filters for RWA2000 Series



**Low-pass octave filters cover the frequency range from 20 to 2000 MHz**

**Five-pole Butterworth filters**

**Custom-designed filters are available**

The programmable octave low-pass filters are designed for the RWA 2000 Series. Up to four filters can be installed on the Main Filter Matrix inside the Analog Box unit of the latest Guzik RWA models. The filters on the matrix can be combined such a way that the matrix will cover up to four octaves within the frequency range from 20 to 2000 MHz.

Figures A and B represent the frequency response of the programmable filters for the frequency range 125-2000 MHz. The following filters are currently in production: 20-50 MHz, 50-125 MHz, 125-250 MHz, 250-500 MHz, 500-1000 MHz, and 1000-2000 MHz.

Five-pole Butterworth filter is a standard option available for the RWA 2000 series. Upon customer request, Guzik Technical Enterprises can develop different filter types based on the same technology.

### **Programmable Filters Specifications:**

- Pass band frequency response deviation from the theoretical curve: 0.5dB (1dB maximum)
- Frequency resolution: continuous
- Non linear distortions: less than 1%
- Attenuation at frequency higher then  $2F_c$ : more than 30 dB



2443 Wyandotte Street  
Mountain View, CA 94043  
Phone: (650) 625-8000  
Fax: (650) 625-9325  
E-mail: [sales@guzik.com](mailto:sales@guzik.com)  
<http://www.guzik.com/>

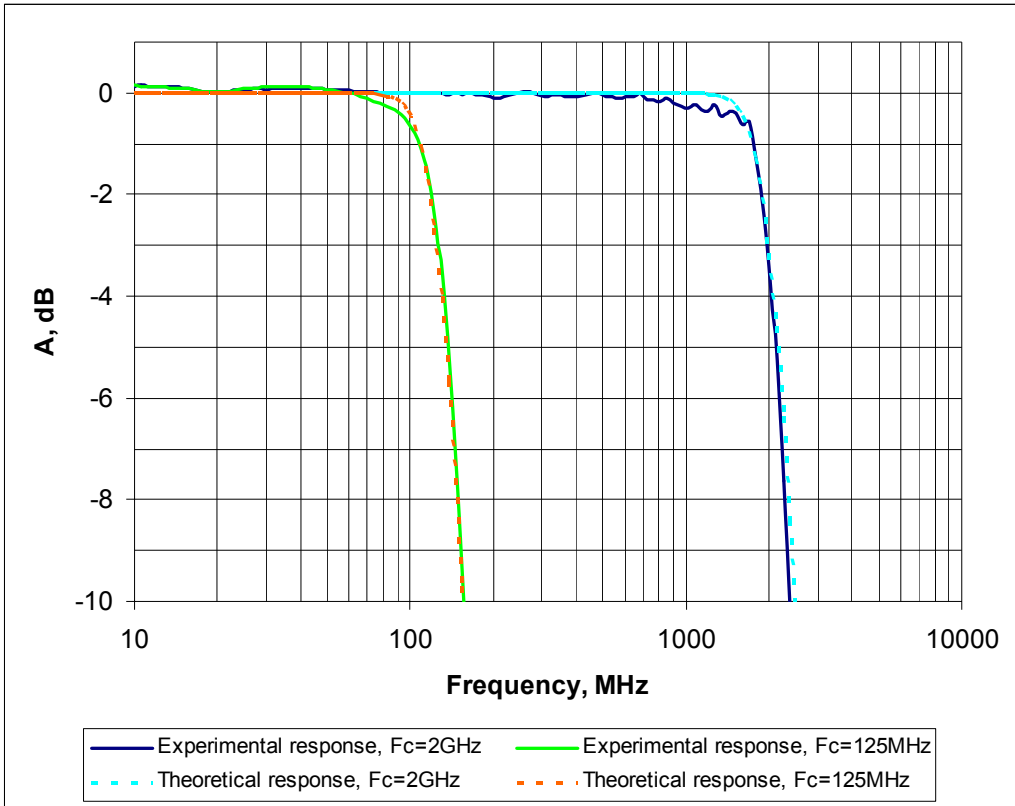


Figure A: Theoretical and Real Frequency Response of Programmable Filters

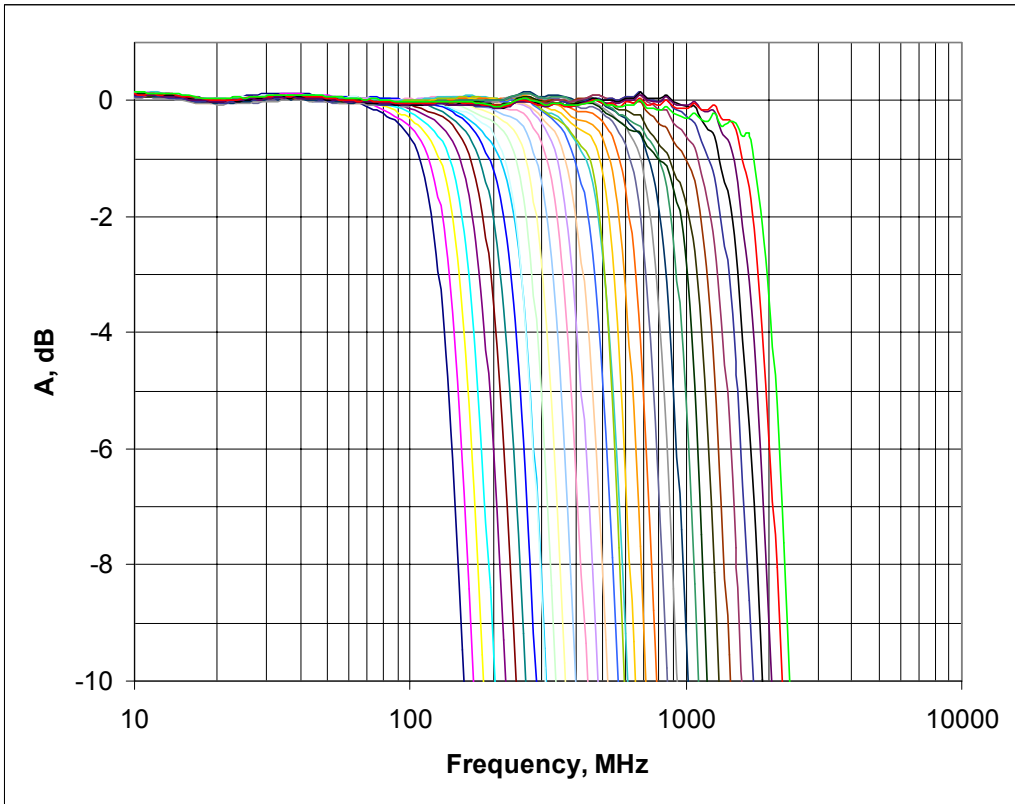


Figure B: Frequency Response of Four Programmable Filters (125-2000 MHz)

