

Digital Tunable Filters

Smiths Interconnect's Standard Digitally Controlled Bandpass Filters are available with 3 or 5 sections in the frequency range of 25 MHz to 3000 MHz. The typical insertion loss at center frequency ranges from 0.7 dB to 1.0 dB and standard tuners have a 3 dB passband bandwidth of 5%. Digitally Controlled Bandreject Filters are also available. Standard Bandreject Filters have 3 or 5 sections with a center frequency between 25 MHz to 220 MHz and a notch depth of 50 dB to 75 dB. The rejection bandwidth is typically 1%. All Standard Digitally Controlled Filters have a dial accuracy of better than 0.5%. The filter is controlled by sending commands as ASCII strings to the RS232 port.

- 24 MHz to 3000 MHz
- Octave Tuning
- High Position Resolution
- Built in Backlash Compensation
- Simple Command Structure

Communications:

The controller communicates via a RS232-C port with the following settings:

9600 BAUD, 8 Bits/Byte, No parity, 1 stop bit. If a PC is used to send commands to the controller, a standard serial cable must be connected to the RS232 port of the filter.

Power Supply:

The digitally controlled filter is supplied with a 24 VDC, 0.625 mA, universal power supply. Typically a filter draws about 250 mA of current.

Lifetime Expectancy & Servicing:

Lorch's Digitally Controlled Filters do not require servicing. The meantime to failure is about >1,000,000 tune commands (based on 1 tune command every 30 seconds over 1 year) and is mainly determined by the limited number of write cycles to EEPROM to keep track of the current frequency setting.

For a complete manual please contact factory.

Bandwidth	Designator
3 dB	/(blank)
special	/X
Connectors	
Connector Type	Designator
BNC Female (1)	B
F	F
N Female	N
SMA Female	S
TNC Female (1)	T

Outline Drawing:

